A REVIEW OF CENTRALIZED READINESS
REPORTING SYSTEMS AND THEIR IMPACT
UPON THE U. S. MARINE DIVISION

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THESIS

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by

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of Staff Force Status and Identity Report (FORSTAT) and the Marine
Automated Readiness Evaluation System (MARES) and examined their
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I. INTRODUCTION

A.   THE U. S. MARINE CORPS IN A CHANGING ENVIRONMENT

Today the Marine Corps, with its 180,000 plus officers and men, finds itself in the midst of a rapidly expanding technological and informational explosion. At the present time, in our society, knowledge is doubling approximately every ten years, with no indication that the pace will decline in the forseeable future.

The past ten year period, 1964 to 1974, has been particularly significant in the respect that it has also included the buildup, conduct and subsequent draw down from a considerable war effort. In addition this period has seen a change of political parties within the U. S. Government with a corresponding change in policies and key governmental personnel, plus a fundamental questioning of social and cultural values by the American people. Among these social and cultural values under scrutiny, and one of the most significant, has been the relationship of man to a highly organized, technologically oriented society that is centrally controlled by national and corporate organizations.[1] Both advocates and opponents of the continued increase in technological and organizational complexity agree that the social and cultural structure

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[1] Reich, Charles A., The Greening of America, New York: Random House, 1970, p. 4.

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of·American society has been affected.[2]

Caught up in this rapidly changing environment, the traditional, bureaucratically structured Marine Corps finds itself striving, both as an organization and at the individual level, to meet the challenge of change while at the same time retaining fundamental, traditional beliefs and values.

To function efficiently in this radically changing environment, the Marine Corps must possess the dynamic ability to meet the real challenge of developing and maintaining a modern sophisticated amphibious force capable of fulfilling its world-wide commitments. Applicable portions of the current Marine Corps mission include the following:

"The Marine Corps within the Department of the Navy, shall be so organized as to include not less than three combat divisions and three air wings, and such other land combat, aviation and other services as may be organized therein.

The Marine Corps shall be organized, trained, and equipped to provide fleet marine forces of combined arms, together with supporting air components, for service with the fleet in the seizure or defense of advanced naval bases and for the conduct of such land operations as may be essential to the prosecution of a naval campaign. In addition, the Marine Corps shall provide detachments and organizations for service on armed vessels of the Navy, shall provide security detachments for the protection of Naval property at naval stations and bases, and shall perform such other duties as the President may direct. However, these additional duties may not detract from or interfere with the operations for which the Marine Corps is primarily organized.

The Marine Corps shall develop, in coordination with the Army and the Air Force, those phases of amphibious operations that pertain to the tactics, techniques, and equipment used by landing forces.

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[2] Roszak, Theodore, The Making of a Counter Culture, Garden City, N.Y.: Doubleday and Co., 1969, pp. 5-14.

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. The Marine Corps is responsible, in accordance with integrated joint mobilization plans, for the expansion of peacetime components of the Marine Corps to meet the needs of war."[3]

The requirement to assume and fulfill the above responsibilities, in a changing social and organizational environment, is the challenge facing the Marine Corps in the 1970's.

Against the backdrop of continuing social, economic, political, technological and organizational changes affecting the American culture, this study focuses upon one particular aspect of the changing environment.[4] That aspect is the effect of centralization within the organizational setting. To analyze this particular topic, a case study technique will be utilized in which two very significant centralized readiness reporting systems, currently affecting the U. S. Marine Corps, will be reviewed and their impact upon the U. S. Marine division determined.

B.   THE EVER INCREASING REQUIREMENT FOR CENTRALIZED USE OF READINESS INFORMATION

Since 1945 the United States has borne, and continues to bear, the principal burden of maintaining the worldwide military equilibrium which insures the security and survival of the Free World. In fulfilling this responsibility the United States has long recognized the fact that the world is militarily dominated by two states -- the United States and the

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[3] Thomas, Gen. C. C. , USMC, Heinl, Col. R. D. , USMC, and Ageton, R. Adm. A. A. , U. S. Navy, The Marine Officers Guide, Annapolis, Md.: U. S. Naval Institute, 1967, pp. 39-40.

[4] Reich, Op. cit. , pp. 3-40.

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Soviet Union. Although this division of the world into two major camps requires the U. S. to be prepared to fight in a nuclear environment, the requirement also exists for the U. S. to be prepared to intervene militarily in situations of less than nuclear intensity.

Although the Marine Corps represents a significant portion of the general purpose forces earmarked for commitment in an all out nuclear war environment the rapid reaction, hard hitting quality of the Marine Corps, as a force in readiness, can also be used to great advantage in tense, rapidly changing crises situations of a strictly conventional nature. It is this "flexible response" capability of the Marine Corps, covering the full sepctrum of employment from merely a show of force up to a full scale commitment, that makes the Marine Corps the logical choice in executing certain military actions in support of American foreign policy. In accordance with its amphibious mission, elements of the Marine Corps are prepared to conduct immediate, quick reaction type operations like show of force demonstrations or swift incursion type amphibious raids against a hostile force, or any other level of amphibious operation up to and including a full scale amphibious assault against a defended hostile shore.[5]

The speed of modern communications has made it possible for extremely high levels of control to be exercised during emergencies.

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[5]U. S. Marine Corps, Marine Corps Landing Force Manual 01, Doctrine for Amphibious Operations, Washington, D. C.: Department of the Army, the Navy, and the Air Force, 1967, pp. 1-3. 1-4.

With operational commands ranging from the local tactical commander up to the National Command Authority actively monitoring or directing contingency operations, the importance of precise unit, personnel and equipment readiness information becomes obvious.

Therefore both before a decision to commit Marine forces has been made and after their actual involvement, it is absolutely imperative that timely and accurate unit personnel and equipment readiness information be available at all echelons concerned. This fact has led to a continually increasing requirement for the central collection and utilization of readiness information.

C.   THE OBJECTIVES OF THE STUDY

1.   The Issue Under Study

It is the purpose of this study to review currently existing centralized readiness information reporting systems, now in use by the U. S. Marine Corps, and examine their functional impact upon the U. S. Marine division.

2.   Specific Objectives of the Study

The study was undertaken with the following specific objectives:

a.   Review the trend toward centralization of control, within the Department of Defense, and the ever increasing requirement for readiness information at the highest levels of control.

b.   Examine the collection, dissemination, management, and usage of operational readiness information within the Marine Corps,

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with special emphasis upon activities within a typical Marine division.

   b.   Examine the impact of centralized readiness reporting systems upon a typical Marine division.

   d.   Provide recommendations for the improvement of current and future readiness reporting within the Marine Corps.

D.   SCOPE OF THE RESEARCH EFFORT

The scope of the research effort is confined to the following:

1.   A review of the background and history of centralization of control within the Department of Defense and of centralized readiness information reporting requirements existing within the Department of Defense in general and the Marine Corps in particular, with special emphasis upon the past ten year (1964-1974) period.

2.   An identification and description of those centrally controlled readiness information systems that are currently in effect within the Marine Corps, and have an impact at the Marine division level.

3.   An investigation into how a typical Marine division (1) collects readiness information in response to centrally controlled, higher level directives, (2) disseminates readiness information to both higher and lower echelons, and (3) utilizes readiness information internally within the division.

4.   An analysis of the impact that centralized readiness reporting requirements have had upon the Marine division in terms of the effect upon (1) organizational structure, (2) man-hour requirements, (3) the decision making process, and (4) individual commanders, and key

division staff officers, and personnel.

E.   ASSUMPTIONS CONTAINED IN THE STUDY

1.   The first assumption, carried throughout the study, is that the procedures and techniques described for a typical Marine division, generally reflect the conditions existing in all Marine divisions within the Marine Corps. It is acknowledged that minor variations exist between units, based upon differences in personnel, situations, and geographical location. However, it is felt that these variations are indeed minor and therefore the results of this study generally reflect procedures and techniques currently practiced throughout the Marine Corps.

2.   The second assumption is that the Marine Corps can be closely identified with the traditional bureaucratic organizational model. As a bureaucratic organization, the Marine Corps is generally subject to the same influences that affect any bureaucracy in which centralized control exists. The more familiar of these influences include the following:

a.   Advantages of centralized control:

(1)   Centralized control utilizing a centralized network of communications contributes to more effective coordination.[6]

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[6] Blau, Peter M. and Scott, Richard W., Formal Organizations, Scranton, Pa.: Chandler Publishing Co., 1962, p. 126.

(2)   Centralized control contributes to uniform ad-
ministration of an organization.[7]

b.   Disadvantages of centralized control:

(1)   Less freedom exists for lower level independent
action.[8]

(2)   Organization executives tend to become special-
ized and therefore cannot readily be moved from one assignment to
another.[9]

(3)   Over centralization may lead to an abuse of
power.[10]

(4)   Centralized control may lead to a feeling of
futility and frustration among lower level employees.[11]

F.   THE BASIC APPROACH

In order to achieve the stated study objectives, the following
research methods were used:

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[7]March, James G., and Simon, Herbert A., Organizations,
New York: John Wiley and Sons Inc., 1958, p. 207.

[8]Maier, Norman R.F., Psychology in Industrial Organizations,
Boston, Mass.: Houghton Mifflin Co., 1973, p. 574.

[9]Ibid., pp. 574-575.

[10]Mauzelis, Nicos P., Organization and Bureaucracy, Chicago,
Ill.: Aldine Publishing Co., 1973, p. 53.

[11]Hampton, David R., Summer, Charles E., and Webber, Ross A.,
Organizational Behavior and the Practice of Management, Gleview, Ill.:
Scott, Foresman and Co., 1973, p. 449

1.   Analysis and review of the latest studies, literature and documents related to bureaucratic organizations, centralization concepts, and current Department of Defense and Marine Corps policies and activities.

2.   Interviews with Marine division personnel, including experienced division general and special staff officers, reporting unit commanders, and selected enlisted technical experts.

3.   Observation of current conditions and operating procedures existing at the Marine division level.

4.   Recollections based upon the author's firsthand experience in helping to develop and set up an operational readiness reporting system at the Marine division level.

G.   THE MODEL

The literature of the social and behavioral sciences reflect a general agreement on the definition and utility of models. Models serve, to some degree, four distinct functions.[12] These include (1) organizing, (2) heuristic, (3) predictive, and (4) measuring. It is the first of these, the organizing function, that is applicable to this study.

By the organizing function of a model, it is meant that a model can be utilized to order or relate disjointed information and thereby show similarities or connections between elements of the data that previously remained unperceived. It is this, identification of relationships between

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[12] Deutsch, Karl W., _The Nerves of Government_, New York: Crowell-Collier Publishing Co., 1963, p. 8.

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facts, that makes the model such an invaluable tool in research efforts.[13]

Models, then, provide a simplified and organized representation of reality. In addition, models provide an attention-focusing mechanism for analysis of an issue and reflect the relationship between various factors which cause a particular result or effect.[14] It is this cause and effect relationship, inherent to models, that makes it possible to outline this particular study in terms of a model.

To assist in the organization and simplification of this study an explanatory model was developed to represent the relationships between the various factors under review. The basic model is depicted in Figure 1 and reflects the cause and effect relationships resulting from the trend toward centralization within the Department of Defense and the eventual utilization of centralized readiness reporting systems within the U. S. Marine Corps.

As a logical starting point for this study, the model begins by identifying certain "causes" occurring within the Department of Defense, that influenced the evolution and eventual usage of two very significant centralized readiness reporting systems. The first of these causal influences is the continuing efforts, since 1947, toward unification of the armed services. Beginning with the National Security Act of 1947, a historical review

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[13] Easton, David, The Political System, New York: Alfred A. Knopf, 1967, p. 52.

[14] McNallen, James B., Zand, Dale E., and Lewin, Arie Y., "The Use of Models for Analyzing the Budget Decision Making Process", Armed Forces Comptroller, Washington, D.C.: Vol. 18 (2-4), Spring-Summer-Fall, 1973, p. 1.

of the trend toward centralization within the Department of Defense is provided.

The second of the causal factors discussed is the influence of Mr. Robert McNamara upon the Department of Defense during his service as Secretary of Defense. In this section the policies and inovations of Mr. McNamara, that contributed to increased levels of centralization, are reviewed.

The third area analyzed under the category of causal factors acknowledges the use of decentralized, non-automated readiness reporting systems prior to the Vietnam war involvement, then addresses the gradual increase in requirements for readiness information as a result of the war effort.

The fourth and final area discussed under this particular category is the development and utilization of the computer. This section presents the history of computer development both within the Department of Defense and the Marine Corps and discusses the utilization of the computer as it can be related to the support of readiness information systems.

Having discussed certain causal factors, the model then identifies the two most significant centralized, automated readiness reporting systems currently in use within the Marine Corps. In support of this portion of the model, a historical review of the development of these two reporting systems is provided, and their utilization within the Marine Corps is discussed in detail.

Representing the "effects" associated with the centralization of

these two reporting systems, the model then identifies three areas that represent significant impacts upon the U. S. Marine division.

The first of these effects, identified by the model, is a review of various organization and structural changes within the division that are directly related to the use of these two reporting systems. The second area identified by the model, is the change in decision making and control procedures that have resulted and are now in use within the division. The third and final effect identified is in the area of impacts upon division personnel actually involved, in varying degrees, with the two centralized readiness reporting systems.

The model also provides a time-line reflecting the beginning of centralization efforts within the Department of Defense in 1947, the initial use of the two readiness reporting systems beginning in 1968, and the current situation, as it exists within the U. S. Marine division in 1974, where centralized, automated readiness reporting systems are fully operational. A feedback loop is also provided by the model indicating that modifications or changes desired, during current use within the Marine division, can contribute to eventual modifications in the utilization of these two centralized, automated readiness reporting systems.

The balance of this document addresses the various elements identified within the basic model.

MODEL

Cause   Effect

Initial Situation:

Utilization of Decentralized, Non-Automated, Readiness Reporting Systems.

Influencing Factors:

1. Trends toward unification and centralization in Armed Services.
2. Mr. McNamara's Centralized Control of DoD.
3. Vietnam War Readiness Information Needs.
4. Development & Availability of the Computer.

Development and Utilization of "FORSTAT"* and "MARES"** Centralized/ Automated Readiness Reporting Systems.

Impact Upon Marine Div.:

1. Organizational changes:
   a. Structural
   b. Man-Hours
2. Decision Making Changes.
3. Effect Upon Marine Division Personnel.

Present:

Centralized, Automated, Readiness Reporting Systems Now Fully Operational.

Feedback

Time Line

1947   1968   1974

* Joint Chiefs of Staff Force Status and Identity Report.

** Marine Automated Readiness Evaluation System.

Figure 1. Transitional Period Within the U. S. Marine Corps Reflecting Conversion to Centralized Readiness Reporting Systems.

II. BACKGROUND AND HISTORY

A.   UNIFICATION AND CENTRALIZATION WITHIN THE

DEPARTMENT OF DEFENSE, AND THE DEVELOPMENT OF

CENTRALIZED READINESS INFORMATION REPORTING

SYSTEMS: U. S. MARINE CORPS 1947 to 1974

As outlined in Chapter I, there were several social-cultural events
and military/organizational factors that contributed to the development
and subsequent utilization of centrally controlled readiness reporting
systems, within the U. S. Marine Corps. Specific causal factors ident-
ified by the model in Chapter I included: (1) the trend, following World
War II, toward unification of the armed services, and gradual central-
ization of control and decision making at the Department of Defense level,
(2) the specific policies and programs established by Mr. Robert
McNamara which led to a high degree of centralization within the Depart-
ment of Defense, (3) increased readiness information requirements
during the Vietnam war, and (4) the development, refinement, and
utilization of the computer during this time period.

Each of the above factors contributed in some way toward the cur-
rent use of centrally controlled readiness reporting systems within the
Marine Corps and therefore are indirectly responsible for the tremendous
impact that these systems have had upon the U. S. Marine division. This
chapter will review each of these causal factors in their historical con-
text. It will also relate the trend toward centralization within the

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Department of Defense since 1947 with the gradual development of centralized readiness reporting systems in the U. S. Marine Corps.

1.   General Background

The basic concept of a central authority collecting and maintaining readiness information regarding subordinate units is as old as military history and fundamental to any competent military organization. In this regard, readiness information represents only one portion of the total amount of unit, individual and equipment related information that can be centrally controlled. The primary objective in centrally collecting and maintaining data of various types, including readiness information, is generally related to increasing the relative control of leaders who carry the ultimate responsibility for certain actions plus insuring that specific military operations or activities support overall unit objectives.[15]

Down through the ages, military history has reflected a gradual change in the importance placed upon a unit's readiness posture at a given time and the availability of readiness information at higher organizational levels. For example, early military forces were generally formed, trained and equipped to a desirable level of readiness, then dispatched to accomplish a specific mission. Under these conditions time and space were critical factors, and the survival of a particular Army or Navy was

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[15]Brown, Fred R., (ed.), Management: Concepts and Practices, Washington, D.C.: Industrial College of the Armed Forces, 1972, p. 24.

dependent, in many respects, upon the supplies, equipment and replacement personnel either foraged or carried along by the organization. With the exception of dispatching additional forces and supplies to a deployed unit, little of anything in the way of assistance could be provided by a central authority.

An excellent example of how the absence of readiness information can be disastrous can be seen in our own military history, during the American revolution. In 1777, General Burgoyne led a British force of approximately 7,000 officers and men from Canada southward toward Albany, with the intention of linking up at Albany with additional British forces which would move up from New York. At Saratoga, along the western bank of the Hudson River just above Albany, the Americans, under General Gates, halted the British forces and by a series of battles forced them into a defensive position alongside the Hudson. At that point, a mere 40 miles below Albany, General Clinton with the additional British forces from New York was successfully pushing his way up the Hudson with sufficient supplies to last both British forces for six months. General Clinton, as well as the rest of the British forces in America, assumed that General Burgoyne was in an adequate readiness posture to hold his position on the Hudson and therefore the force from New York did not advance as aggressively as it might otherwise have done. Meanwhile, the readiness posture of the Burgoyne force deteriorated rapidly. Under seige by the Americans, the British position became grave. Supplies and ammunition quickly became depleted and Indian and Canadian troops began to desert.

In the end, General Burgoyne surrendered his force to General Gates, General Clinton returned toward New York and the British effort to crush the revolting colonies was dealt a severe blow. Had General Clinton held better readiness information concerning the status of the forces under Burgoyne, he may have pressed his attack more aggressively and the course of world history might have been altered.

Today, as a result of technological changes, improvements in communications capabilities and the development of the computer, large scale military operations have been altered considerably. As these capabilities have been perfected, the trend has been, especially within the United States, toward more and more centralization of control. Today's combatant forces can be likened to the apex of a pyramid or the point of an arrow. Behind the deployed forces exists a broad column of supplies, equipment, and replacements leading ultimately back into the entire American political and economic system. Vital to this structure are the communications networks including readiness reporting systems necessary to control and coordinate the effort.

2. The Trend Toward Unification and Centralization Within the Department of Defense During the Period 1947 to 1974

a. Trend toward unification and centralization during the period 1947 to 1960

Throughout the history of the United States Armed Forces, there has been a gradual movement toward unification of the services and a centralization of power within the Department of Defense.

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Although this trend has been hotly debated and strenuously contested the trend nevertheless has continued.

For some 150 years prior to World War II, and up to the eventual enactment of the National Security Act of 1947, the Armed forces of the United States consisted of two major services, the Army and the Navy. These two services had been created at different times by separate legislation, were monitored by separate congressional committees and in general evolved as separate and distinct organizations. Throughout this period the Marine Corps, although under occasional threats calling for its abolution or merger into the major services, continued to exist as an integral part of the Naval Establishment.

World War II, however, generated certain changes in organization and attitudes that precipitated a trend toward unification of the U. S. Armed Forces. As a result of experience in various operational theaters during the war it was generally acknowledged that unity of command must replace mutual cooperation as the means for coordinating joint operations. Although the establishment and utilization of unified commands, in most operational theaters, led to considerable improvement in coordination and teamwork, interservice conflicts, competition, and duplication continued.

Two areas of concern presented the strongest appeal for unification during this period. The first was the field of logistics where advocates of service unification felt considerable improvements could be made to reduce competition and duplication among the services. The

other area was the role of strategic airpower where it was felt that an autonomous Air Force should be established as a separate service, to insure the highest level of decision making possible regarding the employment of strategic airpower.

Throughout this period the attitude of the Navy reflected growing misgivings with the concept of unification because of the threat of the possible loss of its air arm to a proposed Air Force Department and even the possibility of the loss of its Fleet Marine Force to the Army.

After World War II, spokesmen for the Navy continued to lead the opposition against unification efforts. Unification, they felt, was not simply a matter of top organization but "struck deeply into the traditions, fiber, morale, and operations of the military services", and therefore should be approached with considerable caution.[16]

The separate services were not alone in voicing their opinions regarding the relative merits of unification. Other participants included the Joint Chiefs of Staff and the Service Secretaries. Although the Joint Chiefs of Staff had been established early in the war years by President Roosevelt, to carry out allied strategy, the JCS members were understandably partisans of their respective services. Nor could the Departmental Secretaries be expected to agree on fundamental role and

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[16] Yoshpe, Harry B. and Bauer, Theodore W., Defense Organization and Management, Washington, D.C.: Industrial College of the Armed Forces, 1967, p. 14.

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mission issues raised by the individual services. To resolve the problem
it became increasingly clear that the President and Congress needed a
single individual, a civilian, to control the services and thereby insure a
systematically coordinated defense policy that supported national objectives.

Out of the above was born the National Security Act of
1947 which attempted to bring the Armed Services under one roof, and
provided for a more coordinated relationship between military and civilian
elements of the government. Subsequent ammendments to this Act and
reorganization efforts in 1949, 1953 and 1958 would contribute to the pro-
cess of eventually making centralization a reality within the Department
of Defense.

The National Security Act of 1947 is significant to this
study in that this particular Act laid the groundwork for many later de-
cisions and policies that could lead toward more and more centralization
within the Department of Defense. The Act was a compromise of differing
opinions and arguments set forth as a result of the varying motivations
of the participants involved. Yet few people questioned the need for some
degree of unification of effort among the services and overall centraliza-
tion of control. As an example, General Dwight D. Eisenhower made the
following comments based upon his experience as supreme Allied Com-
mander during World War II:

"During those long months in Europe, my associates and I came
to understand that in a major conflict there was no such thing as a
separate land, sea, or air war. Single purpose and direction and
careful balancing of forces were necessary. We also came to believe

that in the broader field of preparation and production of forces, 'in planning and control of operations, a closely knitted headquarters in Washington would add to material efficiency and economy."[17]

General of the Army, George C. Marshall, had also noted in 1940 the need for "a highly organized team, a balanced team, in contrast to a few highly developed specialities each operating somewhat according to its own theory of combat."[18]

The Act was signed into law on 26 July 1947, followed the same day by an executive order further delineating service roles and missions. Although the 1947 Act did not eliminate the roles and mission controversy it did contribute toward a more unified approach to National Defense. Reflecting the compromise between service positions, Congress made the intent behind the Act clear, in its "Declaration of Policy".

"To provide three military departments for the operations and administration of the Army, the Navy (including naval aviation and the United States Marine Corps), and the Air Force, with their assigned combat and service components; to provide for their control but not to merge them; to provide for the effective strategic direction of the armed forces and for their operation under unified control and for their integration into an efficient team of land, naval, and air forces."[19]

To implement the intent of the Act, Congress established the National Military Establishment which included the services as separate executive departments but placed a Secretary of Defense at

[17]Ibid, p. 10.

[18]DeWeerd, Maj. H. A., (ed.), Selected Speeches and Statements of General of the Army George C. Marshall, Washington, D.C.: The Infantry Journal, 1945, p. 87.

[19]Yoshpe, Op. cit., p. 18.

the head of the new organization to exercise general direction, authority and control over the three separate executive departments.

Thus, at this point, after some 150 years of service separation the U. S. had begun a conscious move toward unification of forces and centralized control within the Department of Defense.

During the period between 1947 and 1949, the new and first Secretary of Defense, James Forrestal, managed to get the Joint Chiefs of Staff to resolve many of the disagreements regarding service roles and missions, but inter-service rivalry continued and the Joint Chiefs could not agree on integrated national strategy.[20] This led the Secretary to seek a means of strengthening his authority over the military departments. As a result the Hoover Commission on "Organization of the Executive Branch of the Government" was established to review the problem. Among the recommendations of the Commission was a call for greater centralization of authority in the Secretary of Defense subject only to the President and Congress, plus improved teamwork throughout the national security organization.

Incorporating many recommendations and changes proposed by Secretary of Defense Forrestal and the Hoover Commission the National Security Act Ammendments of 1949 were adopted. By means of these ammendments much of the present Department of Defense structure was established. The former National Military Establishment was

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Caraley, Demetrios, The Politics of Military Unification. New York: Columbia University Press, 1966, pp. 280-285.

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converted into an executive department and renamed the Department of Defense, the three services became military departments rather than executive branches, and most significantly the Secretary of Defense was now given unqualified direction, authority and control over the Department of Defense. By thus strengthening the position of the Secretary of Defense, the 1949 Ammendments marked a significant step toward firm unification of the services and centralization within the Defense establishment.

The next step in this process of gradual centralization within the Department of Defense occurred as a result of the outbreak of hostilities in Korea in 1950. The outbreak of the Korean war found the Defense Department still debating the question of what level of centralization or decentralization was appropriate for management of the Defense establishment. In addition, interservice conflicts continued regarding disagreements over the size and composition of forces best suited to support national policy. Although the limited scope of the Korean war allowed the Defense establishment some latitude in resolving internal disputes, it was apparent that major conflicts between the services regarding strategy, and roles or missions could be detrimental to any future war effort.

At the end of the Truman administration, as General Eisenhower was preparing to assume the presidency, further change of the Department of Defense was recommended by both the outgoing and incoming presidents. These changes addressed the problem of insuring that

the U. S. was prepared to fight wars of limited scope and objectives.

At this point the first real mention of "readiness posture" was discussed. The Korean war had pointed out the lack of readiness of America to fight limited wars. Up until this point the U.S. had, to a large extent, based its military doctrine and planning upon the concept of general war in which the country and economy would be gradually mobilized, much as had occurred in World War II. However, it was now becoming obvious that the U. S. must be ready to conduct not only general war but also to fight limited wars for limited objectives. The basic policy, which has not been substantially changed by succeeding administrations, had been set forth by Secretary of Defense George C. Marshall in September of 1950

"For the last 5 years our supreme policy has been to curb Communist aggression and, if possible, to avoid another world war in doing so. The execution of this policy has required extraordinary patience, firmness and determination in meeting and helping our allies to meet challenges in Iran, Greece, Turkey, Trieste, Berlin, and Indochina, and finally Korea. There can be, I think, no quick and decisive solution to this global struggle short of resorting to another world war. The cost of such a conflict is beyond evaluation. It is, therefore, our policy to contain Communist aggression in different fashions in different areas without resorting to total war, if that is possible to avoid."[21]

In line with this new direction of foreign policy, in which the United States would maintain the capability to conduct both limited objective engagements and general war, the case for additional centralization of control was strengthened. With the termination of operations

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[21]Yoshpe, Op. cit., p. 30.

in Korea, the Eisenhower Administration made it clear that the Armed Forces and defense expenditures were to be reduced and that the military was going to be brought under greater subordination to civil authority and policy.

To improve the readiness posture of the Armed Forces, the Eisenhower Administration rejected the earlier concept of establishing a predetermined future Mobilization Day (M-Day) toward which the services would strive in terms of a given level of readiness. The objection to this approach was that it alledgely led to static planning, expensive training, and was conducive to the accumulation of obsolete equipment. In place of this approach, the floating D-Day concept was introduced. Under this concept, a particular future date and anticipated readiness level was not established. Rather the date was allowed to float ahead and as the services approached the desired readiness level specified, the date and readiness requirements were advanced. Thus the buildup of the services was geared to an evenly paced partial mobilization for an indefinite period, that was constantly being revised to reflect the changing requirements dictated by world events. The significance of this particular approach, during the Eisenhower Administration, was that the services were encouraged to gradually improve their overall readiness posture on a continuous basis subject to annual funding and programing restraints. In essence, this approach marked a significant step toward the use of budgetary considerations as a centralized

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controlling element in overall national defense planning.[22]

In further response to the Eisenhower influence, a committee was constituted to review the basic organization and procedures within the Department of Defense with particular attention on the position of the Secretary of Defense and his principal civilian and military officials. The results of this committee's efforts became the basis of Reorganization Plan No. 6 of 1953 which set forth three basic objectives. These included (1) a clear and unchallenged responsibility in the Defense Establishment, (2) maximum effectiveness at minimum cost, and (3) the best possible military plans. For purposes of this research, the first objective is the most significant. To achieve this particular objective it was made clear that the lines of authority within the Department of Defense would be such that there could no question as to the direction, authority and control of the Secretary of Defense over all the agencies and components of his department. There was to be a single line of authority from the President, in his capacity as Commander in Chief, to the Secretary of Defense and no function within the Department of Defense was to be performed independently of the Secretary of Defense. Thus the gradual centralization of power over the services was continuing at the Secretary of Defense level.

The next significant event in this gradual process was the Department of Defense Reorganization Act of 1958. Critics of the defense organization during this period were complaining that each service was continually

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[22]Yoshpe, Op. cit., pp. 31-32.

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striving to acquire an arsenal of weapons which would allow it to carry out virtually any and all missions. To counter this trend and to study the aspects of further centralization of control, the Rockefeller panel of 1956 had been appointed. It was the opinion of this panel that the military services were becoming competitive rather than complimentary and their actions were not in accord with the best interest of national defense policies.

Pressure for further organizational change was again coming from the President. President Eisenhower felt that there was a need for clear subordination of the military services to duly constituted civilian authority and that clear organization and decisive central direction would be required to end continuing interservice disputes.

It was at this point that the concept of unified and specified commands was introduced, by the Rockefeller Panel, as a solution to the lack of control over the services by the Secretary of Defense. This fundamental concept was enacted by the Department of Defense Reorganization Act of 1958, thus establishing the present day chain of command structure for national defense as shown in Figure 2. Under this Act all operational forces were to be organized into unified or specified commands which would perform missions dictated by strategic requirements. However, the military departments would no longer be responsible for conducting combat missions but were to be confined to providing recruiting, training, supplies, and similar type support to the unified commands.

The new chain of command from the President, through
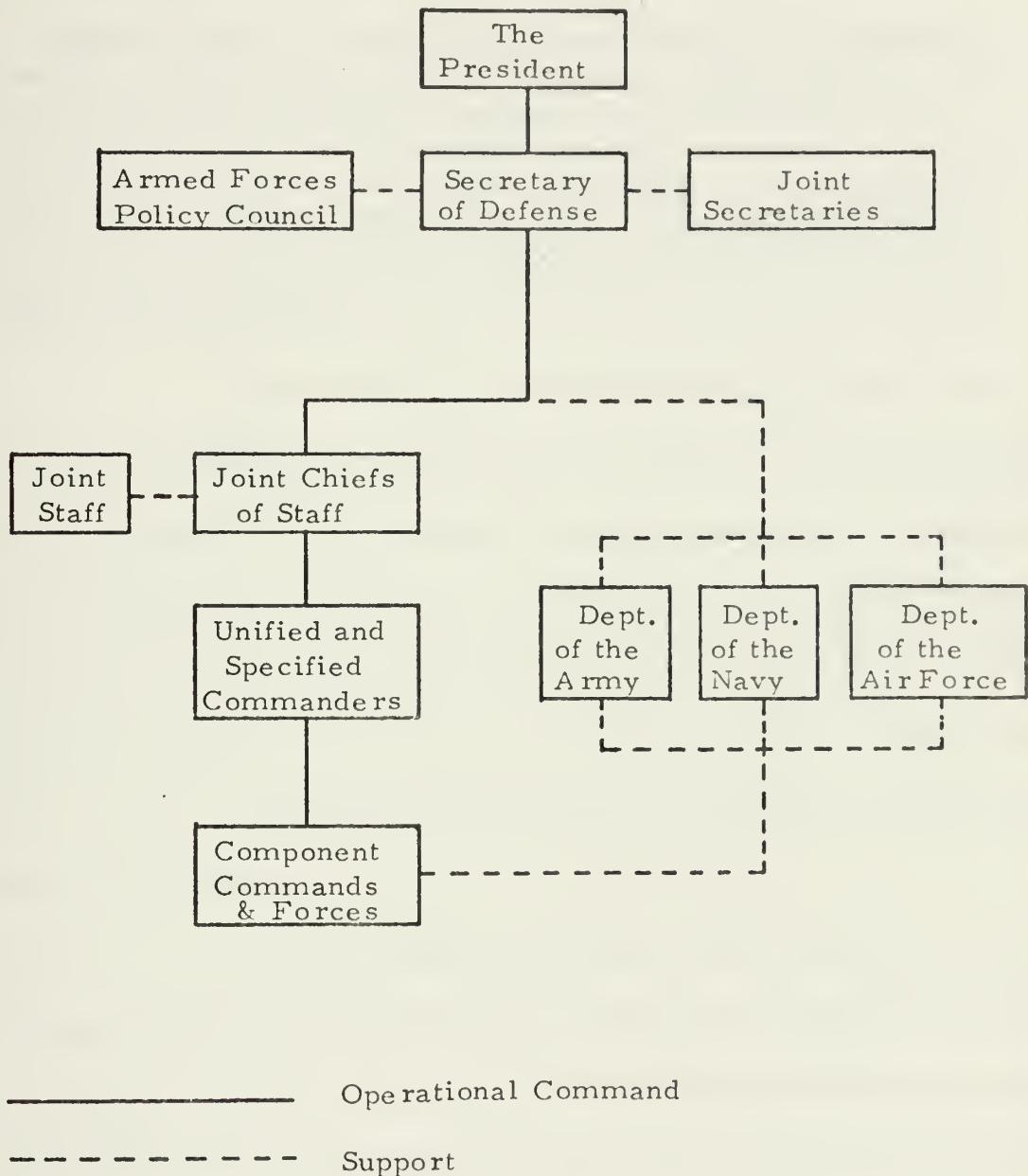
Figure 2.   Chain of Command to the Unified
and Specified Commands

the Secretary of Defense, to the unified and specified commands was clearly spelled out in the Act.

> "With the advice and assistance of the Joint Chiefs of Staff the President, through the Secretary of Defense, shall establish unified or specified combatant commands for the performance of military missions, and shall determine the force structure of such combatant commands to be composed of forces of the Department of the Army, the Department of the Navy, the Department of the Air Force, which shall then be assigned to such combatant commands by the departments concerned for the performance of such military missions."[23]

In essence, the reorganization had provided a vast increase in the authority of the Secretary of Defense by shortening the chain of command to the operational forces. It was hoped, by Congress, that this additional centralization of power at the Secretary of Defense level would increase the overall efficiency of the Department of Defense and avoid the general tendency toward Service rivalry and controversy.

b.   Continuing Trend Toward Centralization During the Period 1961 to Present

With the onset of the Kennedy administration in 1961, the stage had been set and the lines of authority sufficiently established for the newly appointed Secretary of Defense to bring the defense establishment to a level of centralized control never before experienced by the Armed Forces.

The appointment of Mr. Robert McNamara in 1960 as Secretary of Defense resulted in many far reaching effects upon the

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[23]Yoshpe, Op. cit., pp. 42-44.

Armed Services. In fact current centralized readiness reporting systems now in use within the services can, to some degree, trace their origin back to the information collecting systems implemented during the McNamara years to support centralized decision making.

In order to justify the increased centralized authority of the Secretary of Defense, Mr. McNamara pointed to the mandate given him by President-elect Kennedy in the State of the Union Message of 29 January 1961. In this speech the new President stated that he had instructed the Defense Secretary to:

"Reappraise our entire defense strategy; our ability to fulfill our commitments; the effectiveness, vulnerability and dispersal of our strategic bases, forces, and warning systems; the efficiency and economy of our operation and organization; the elimination of obsolete bases and installations; and the adequacy, modernization, and mobility of our present conventional and nuclear forces and weapons in the light of present and future dangers."[24]

The framework for many of the innovations introduced by Mr. McNamara, was also influenced by the concept of "flexible response" which was first used by the Kennedy Administration and later by the Johnson Administration. This concept called for a capability to conduct a controlled and deliberate level of warfare ranging from brush-fire or peripheral type wars up to a nuclear engagement. To meet the requirements under this policy, Mr. McNamera believed that greater efforts should be made to obtain more reliable and meaningful information for use by top level decision makers. In this regard various organizational

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[24] Yoshpe, Op. cit., p. 57.

changes were made throughout the Defense Department to insure that the required information for integrated decision making was provided.

Additional centralization of power occurred during this period due to the establishment of defensewide activities and agencies. These agencies and activities, which are with us today, were established in an effort to extend integrated management techniques to common supply and service activities. Significant among these, for purposes of this study, were the Defense Communication Agency, Defense Intelligence Agency and Defense Supply Agency.

Throughout his tenure of office, Mr. McNamara indicated that he saw his position as that of an active leader rather than a passive judge. He also felt that although the actual operation of a program could be managed on a decentralized basis, unified planning, programming, and decision making were indispensable to effective management and must occur at the top of the decision pyramid. Mr. McNamara made clear his belief in active management from the top when he made the following statement.

"In many aspects the role of a public manager is similar to that of a private manager. In each case he may follow one or two alternate courses. He can act rather as a judge or as a leader. As the former he waits until subordinates bring him problems for solution, or alternatives for choice. In the latter case, he immerses himself in his operation, leads and stimulates an examination of the objectives, the problems and the alternatives. In my own case, and specifically with regard to the Department of Defense, the responsible choice seemed clear."[25]

[25] McNamara, Robert S., The Essence of Security, New York: Harper and Row, 1968, pp. 87-88.

To increase the decision making capability of the Office of the Secretary of Defense, Mr. McNamara also initiated the systems analysis technique.[26] Much has been written regarding the use of this analytical technique including both its contribution to and dependency upon a centralized environment.[27] A significant contribution of this technique to centralization, and an area related to this study, is the fact that subordinate organizations throughout the Defense Department were required to provide the necessary information to support this integrated approach to decisionmaking.

Program budgeting was another control system instituted within the Defense Department during the McNamara years that contributed to further centralization.[28] Although program budgeting greatly increased both the degree of civilian control of the Defense Department and the incentives for efficient resource allocation, certain problems were created. One of the effects of centralizing the responsibility for decisionmaking, in the Secretary's office, was to cut off competiton among the Services in designing and developing systems for mutual missions. Thus once competing systems were ruled out, the Secretary had little choice but to follow

[26]Enthoven, Alain C. and Smith, Wayne K., How Much is Enough? New York: Harper and Row, 1971, pp. 60-71.

[27]Murdock, Dr. Clark, "Policy Consequences of Systems Analysis in the Military", Paper prepared for delivery at the Annual Meeting of the American Political Science Association, Jung Hotel, New Orleans, La., September 4-8, 1973, pp. 1-3.

[28]Hitch, Charles J. and McKean, Roland N., The Economics of Defense in the Nuclear Age, New York: Atheneum, 1973, pp. 44-65.

the chosen systems through to completion, regardless of cost. Also, as a result of centralized decision making, the Secretary's office assumed control over many issues that simply were not important enough to justify its concern. For example, at one point, Mr. McNamara himself decreed that the traditional Marine belt buckle would be replaced with a standard Army buckle, as a cost saving measure.[29] In the opinion of critics, over-centralization had reached a dangerous point and the services had been divested of their autonomy to the point that a vacuum had been created in which only the Secretary or his staff could make decisions.

Centralization within the Department of Defense under Mr. McNamara was and still is a much debated issue. Proponents of strong centralization contended that it was required due to modern scientific and technological advances which significantly revolutionized defense strategy. In addition, they felt that centralization was necessary to control inter-service rivalries, reduce duplication of effort, and keep defense costs within manageable levels. Critics, on the other hand, complained of reduced morale of military leaders, a tendency for military judgment and professional experience to be downgraded, the reduction of creative thought and initiative, and the fact that centralization was setting the stage for eventual unification of the services.

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[29]Singer, Neil M., Public Microeconomics, Boston, Mass: Little, Brown and Co., 1972, pp. 272-280.

Following the above chronological history of central-
ization in the Defense Department, the next and final significant event was

the appointment of Mr. Melvin Laird as Secretary of Defense. Among

other accomplishments the net effect of the Laird Administration was to

strip power from the office of the Secretary of Defense and return it to the

services. President Nixon's pledge to "correct over-centralization" was

echoed by Mr. Laird in a 1971 speech.

"I inherited a system designed for highly centralized decision-
making. Over-centralization of decision making in so large an
organization leads to a kind of paralysis. Many decisions are not
made at all, or, if they are made, lack full coordination and com-
mitment by those who must implement the decisions. The traffic
from lower to higher echelons may be inhibited; relevant and essen-
tial inputs for the decision maker can be lost. In addition, there
seemed to be insufficient participation by other agencies with im-
portant responsibilities for national security."[30]

Although a large percentage of the centralized systems

and procedures established during the McNamara years were retained, in-

cluding various readiness information reporting systems, the power of the

office of the Secretary of Defense was significantly reduced and consider-

able decision making power returned to the services in an agreement

signed by Deputy Secretary of Defense Packard, the Service Secretaries

and the Chairman of the Joint Chiefs of Staff in July of 1969.[31] This agree-

ment marks the latest event in the chronological review of levels of cen-

tralization within the Department of Defense since there have been no

[30]Murdock, Op. cit. , p. 5.

[31]Ibid

significant efforts by subsequent Secretaries of Defense or the Services to alter the above "Truce" agreement.[32]

3.   History of Centralized Readiness Information Reporting
      Within the Marine Corps During the Period 1947-1974

      The history of centralized readiness information reporting within the Marine Corps, during the period 1947 to 1974, also reflects the influence of the social-cultural events and military/organizational factors discussed in Chapter I. In this respect, the first part of this chapter addressed two of the specific causal factors identified by the model in Chapter I. This included a chronological review of (1) the gradual trend toward unification of the Armed Services and centralization of control and decision making at the Department of Defense level during the period 1947 to 1960, and (2) the specific policies and programs established by Mr. McNamara, subsequent to 1960, which contributed to the continuing trend toward centralization within the Department of Defense. The first part of this chapter also addressed the influence of Mr. Laird and subsequent Secretaries of Defense whose policies have established the degree of centralization that currently exists within the Department of Defense.

      This final section of this chapter will address the remaining two, specific, causal factors identified by the model in Chapter I. These

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[32]Schlesinger, James R., Annual Defense Department Report. FY 1975, Washington, D.C.: U. S. Government Printing Office, 1974, p. 217.

factors, which helped contribute to the eventual utilization of centrally controlled readiness reporting systems within the Marine Corps, will be discussed at the appropriate historical point during a general review of the history of centralized readiness reporting within the Marine Corps. The factors to be discussed include (1) the increased need for readiness information as a result of the Vietnam War effort, and (2) the influences resulting from the development, refinement and availability of the computer.

a.   Trend Toward Utilization of Centralized Reporting Systems within the Marine Corps

The development of centralized reporting systems, in general within the Marine Corps, can be traced to 1949 when the Marine Corps began to mechanize personnel reporting into what came to be known as the Personnel Accounting System (PAS). This forerunner of later reporting systems was gradually changed from a manual accounting operation to a machine processed procedure which provided accurate current personnel data and a complete historical record of each Marine's service career. As a management tool this system was again expanded, in 1960, to a computer-oriented system for use throughout the Marine Corps to provide detailed personnel information for use in various planning activities. The second significant centralized reporting system to be initiated by the Marine Corps was the Supply Accounting System (SAS) which is the technique for recording the receipt or expenditure or other disposition of materials used by the Marine Corps. This computer oriented system was established in 1958 and subsequently utilized by all large Marine Corps

supply activities. The third major reporting system to be mechanized and centrally controlled was the Fiscal Accounting System (FAS). This system was established to account for appropriated funds at various command levels. As time went by and the Marine Corps entered the 1960's it became obvious that faster and more accurate readiness reporting methods would be required throughout the Marine Corps. Fast moving world events placed increased emphasis on the need for better control and for long-range planning.

The actual development of centralized readiness information reporting systems can be traced to October of 1962 when the Department of Defense provided guidance to the services for the development and operation of a Force Status and Identity Reporting System.[33] From this guidance the Marine Corps developed and utilized the Operational Status Reporting System (OPSTAT), up until November of 1968, when it was replaced by the existing centralized readiness reporting system to be discussed in detail in Chapter III.

b.   The Increased Need for Readiness Information

as a Result of the Vietnam War Effort

It was the Vietnam war period that saw the real development of the contemporary centrallized readiness reporting systems. As a result of the involvement in Southeast Asia, it quickly became obvious

[33]U. S. Army, Merger of the Automated Army Unit Readiness Reporting System with the J. C. S. Force Status and Identity Reporting System, a study prepared for the Chief of Staff, U. S. Army, Washington, D. C.: U. S. Army, 1973, p. II-6.

that up to date, accurate readiness information was an absolute necessity. Since the deployed Marine units were at the receiving end of the personnel and logistics support pipeline, the readiness posture of a particular combat unit was directly related to its personnel and logistic status. In addition, since troops were trained in CONUS before assignment to Vietnam, the training readiness posture of deployed units was generally excellent. Therefore, the real emphasis on readiness, for deployed units, was in the area of logistics. The continuing demand for all types of logistic support dictated the establishment of a supply, equipment and maintenance pipeline extending back to various supply points located within the United States. It was this requirement for continuing, accurate and efficient support that virtually guaranteed the development of a centralized logistics readiness reporting system.

The tempo of operations, during this period, placed heavy demands upon the training and staging units partcipating in the personnel and logistics support pipeline. Therefore, the requirement to centrally control resource inputs also contributed to the eventual use of centralized readiness reporting systems, not only within the Marine Corps, but throughout the Department of Defense.

It can be seen, then, that the increased requirements for unit readiness information, as a result of the Vietnam war involvement, coincided with the period of centralized control advocated by Mr. McNamara. The eventual development of centralized readiness reporting systems was all but inevitable.

c. Influences Related to the Development, Refinement, and Utilization of the Computer

The development of the computer for govermental use can be traced to June of 1948 when the National Bureau of Standards entered into a contract with the Eckert-Mauchly Company for the construction of a Univac for Census computations. The first Univac ever built was subsequently accepted by the Government on March 31, 1951, and is still in use today by the National Bureau of Standards.

The first utilization of computers by the Marine Corps began in December of 1951 with the creation of a Data Processing Platoon utilizing mobile, van-mounted installations.[34] Within one year the Marine Corps had established thirteen computer installations, and within four years each Marine division and Aircraft wing was utilizing computers for detailed inventory management of extensive supply accounts. Reflecting this rapid increase in the use of computers, 1963 found a total of 37 Data Processing Installations operational throughout the Marine Corps.

Due to the increasing tempo of operations during the mid-1960's, as a result of the Vietnam involvement, the Marine Corps supplemented its existing automated equipment with the purchase of seven IBM 360 computers, in August of 1967. Thus the equipment to support a centralized readiness reporting system existed as early as 1967.

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[34]Wagner, Lt. Col. David H., USMC, History of Automatic Data Processing in the Marine Corps, paper prepared for use at Marine Corps Schools, Quantico, Va., 1971, pp. 5-28.

Since much more readiness information could be maintained and evaluated utilizing computerized systems, and a clear need existed for current readiness information at high decision making levels, the development and subsequent utilization of a centralized, computerized, readiness reporting system was inevitable.

d.   The Systems Approach Era

Realizing the need for a master plan during the development of various Marine command and control, management, and information systems, the Marine Corps, in 1969, published a document titled "Master Plan for Marine Corps Command and Management Systems Development." This document clearly spelled out the extent of centralized reporting that was to take place within the Marine Corps. As stated in this master plan:

"The role of the U. S. Marine Corps as a force-in-readiness and its position within the structure of the Department of Defense creates unique requirements for responsiveness in Marine Corps Command and Management Systems."[35]

In addition the goal and extent of this new approach was indicated by the master plan:

"The ultimate goal of Marine Corps Command and Management Systems is to provide timely and accurate responses in the performance of Marine Corps missions. The entire set of systems, functional, tactical, and information, by which the Commandant and subordinate commanders acquire and direct resources, comprise the Command and Management Systems of the Marine Corps. These Command and Management Systems include all acquisition or control actions employed by commanders."[36]

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[35]U. S. Marine Corps, Master Plan for Marine Corps Command and Management Systems Development (MCMP). Marine Corps Order P5200.15, Washington, D. C.: Headquarters U. S. Marine Corps, 1969, pp. 1-19.

[36]Ibid, pp. 1-3.

Regarding the often debated question of centralization vs decentralization of control the new master plan clearly spelled out the Marine Corps position and proposed course of action:

"In order to effectively utilize limited resources, all activities of the Marine Corps will strive to centralize the information process in Marine Corps Command and Management Systems as warranted by systems requirements."[37]

Following publication of the Master Plan in 1969, the Marine Corps rapidly became involved in the development of, or support of, a large number of centralized reporting systems. This period of time in the Marine Corps also came to be known as "The systems approach era." To support this evolution, a Data Systems Division was established at Headquarters Marine Corps to control and manage the various reporting systems within the Marine Corps.

The current level of involvement, by the Marine Corps, in centralized reporting systems is extensive. A list of the currently active centralized control and reporting systems is provided in Figure 3. Of those systems identified in Figure 3, the last two are of interest to this research effort. The specific centralized readiness reporting systems which will be discussed in detail throughout the remainder of this document are: (1) The Joint Chiefs of Staff Force Status and Identity Report (FORSTAT), and (2) The Marine Automated Readiness Evaluation System (MARES).

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[37] Ibid, pp. 1-15.

1. JUMPS   - Joint Uniform Military Pay System

2. MMS   - Manpower Management System

3. ASIS   - Amphibious Support Information System

4. MEDS   - Mechanized Embarkation Data System

5. AMMO   - Automatic Ammunition Accounting

6. MAGFARS   - Marine Air Ground Financial Accounting Reporting Systems

7. FREDS   - Flight Readiness Evaluation System

8. MIMMS   - Marine Corps Integrated Maintenance Management System

9. NMMMS   - Navy Maintenance and Material Management System

10. NORMPAY   - Normal Pay System

11. SUADPS   - Shipboard Uniform Automated Data Processing System

12. SASSY   - Marine Corps Supported Activity Supply System

13. FORSTAT   - Joint Chiefs of Staff Force Status and Identity Report

14. MARES   - Marine Automated Readiness Evaluation System

Figure 3. Centralized Control and Reporting Systems Involving the Regular Marine Corps

III. EXISTING READINESS REPORTING SYSTEMS

A.   SPECIFIC READINESS REPORTING SYSTEMS AFFECTING

THE MARINE CORPS

As identified by the model, set forth in Chapter I, the centralized,

automated readiness reporting systems that have evolved and are cur-

rently being supported by the Marine Corps are (1) The Joint Chiefs of

Staff Force Status and Identity Report (FORSTAT), and (2) The Marine

Automated Readiness Evaluation System (MARES). These two reporting

systems were originally combined and were introduced on 1 November

1968 as the "Marine Corps Operational Effectiveness Reporting System."

These new automated readiness reporting systems, which replaced a very

limited, complicated, message type readiness report titled "Operational

Status Reporting System (OPSTAT)," were designed with the following

objectives in mind:

"The objectives of the Marine Corps Operational Effectiveness
Reporting System are to provide commanders at all echelons with
timely receipt, adequate storage, prompt retrieval, and valid
analysis (including prediction) of data relating to readiness and status
of forces information."[38]

This chapter addresses both of the above readiness reporting

systems in detail.

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[38] Fleet Marine Force, Pacific, Combat Readiness Reporting
(MARES/FORSTAT), C.G. Fleet Marine Force Pacific Message
022051 Jan. 71, Hawaii: Fleet Marine Force Pacific, 1971, p. 1.

1.   The Joint Chiefs of Staff Force Status and Identity

      Report (FORSTAT)

      The Joint Chiefs of Staff Force Status and Identity Report

(FORSTAT), which became operational within the Marine Corps on

November 1, 1968, has undergone considerable revision during sub-

sequent years.   However, the fundamental purpose of this readiness

report, which is only one of several reports within the Joint reporting

structure that is required by the Joint Chiefs of Staff, has not substan-

tially changed.   The overall purpose of the "FORSTAT" report is as

follows:

   "FORSTAT has been established as the single automated report
   within the Department of Defense to provide the National Command
   Authorities (NCA),(i.e. the President and the Secretary of Defense)
   and the Joint Chiefs of Staff with authoritative basic identity and
   status information concerning units/organizations of the Armed
   Forces of the United States."[39]

      In addition, the FORSTAT reporting system was established

for the specific purpose of:[40]   (1) Reporting for registration each unit/

organization of the Armed Forces of the United States and each organiza-

tion of other agencies, both foreign and domestic, as required, (2)

reporting basic identity and changes thereto of designated U. S. and

foreign organizations, (3) reporting status information concerning units/

organizations of foreign nations committed to exercise/operations with

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      [39]Joint Chiefs of Staff, Force Status and Identity Report (FORSTAT).
Joint Chiefs of Staff Publication 6, Vol. II, Part 2, Chapter I, Washington,
D.C.: The Joint Chiefs of Staff, 1974, p. 1-1.

      [40]Ibid.

U. S. forces, and (4) providing a single framework for the reporting of required organization and status information, by all levels, to the Joint Chiefs of Staff.

FORSTAT is the medium by which all reporting commands submit status and readiness information to the Joint Chiefs of Staff. Reports are required from Chiefs of Services (separate services), commanders of unified and specified commands (CINC'S), major service commands, separate service operating commands, CINC component commands, and Fleet Marine Forces (which include all Marine divisions, Aircraft wings and Force Troops units).

In addition to the specified information needs of the Joint Chiefs of Staff, the Marine Corps has an additional vested interest in the reporting of readiness information to a central high level authority. The Commandant of the Marine Corps is responsible for the administration, discipline, internal organization, training requirements, efficiency, readiness, and total performance of the Marine Corps. These responsibilities require the receipt, by Headquarters Marine Corps, of timely and detailed information which reflects the current and projected capabilities of the Fleet Marine Forces to execute contingency and general war plans. Further, as a member of the Joint Chiefs of Staff, the Commandant of the Marine Corps is a National Command Authority and is responsible to support and participate in the deliberations and decisions of the Joint Chiefs of Staff on matters that directly concern the Marine Corps. In addition, the Commandant of the Marine Corps is also responsible for providing support to

the World Wide Military Command and Control System.

To meet the above requirements, of both the Joint Chiefs of Staff and the Marine Corps as a service, the "Marine Corps Operational Effectiveness Reporting System" was established, as stated earlier, and included the FORSTAT and the MARES readiness reporting systems. Thus the Marine Corps was able to utilize only one reporting system to meet both the internal needs of the Marine Corps and those of the Joint Chiefs without duplicating the procedures or the reporting requirements of subordinate units.

Information reported under the Marine Corps Operational Effectiveness Reporting System was detailed and extensive. The system required that Fleet Marine Force, and unit commanders, submit information regarding personnel, training, logistic status, copies of contingency plans and orders, the commander's evaluation of the combat readiness of his command, and, when applicable, combat status reports.

Once the FORSTAT reporting system became operational and all concerned became familiar with its procedures, command interest became an important aspect throughout the chain of command. This was demonstrated by the Commanding General Fleet Marine Force Pacific when he stated in a message to his subordinate commanders:

"Combat readiness reports are closely monitored at his headquarters as one of the most important indications of the capability of Fleet Marine Force, Pacific. Good management demands accurate and current decision supporting information. Accordingly: (1) commanders at all echelons must insure that units with responsibility for reportable information provide accurate and complete data to the reporting activity at the time needed, (2) intermediate

commanders must insure reports are forwarded without delay due to the perishability of status information, and (3) reports must be viewed as an evaluation of the unit's ability to carry out its assigned mission and to highlight deficient areas.

The history of the Marine Corps recounts its readiness for combat. The Commandant has stated that it behoves every commander to insure that readiness is computed realistically and accurately. I enjoin each commander to extend every effort to make combat readiness a matter of vital everyday concern among the personnel of your commands."[41]

On 29 February 1972, following approximately four years of reporting, the Marine Corps Operational Effectiveness Reporting System was terminated as a combined FORSTAT and MARES reporting system. At that time the two readiness reporting systems became independent with the FORSTAT report becoming a Joint Chiefs of Staff directed report and the MARES system becoming a Marine Corps only requirement.

Although the FORSTAT report became strictly a Joint Chiefs of Staff directed report, very few other changes were included. The format and detailed reporting requirements of the 29 February 1972 change were promulgated by means of Joint Chief of Staff publication 6, Vol. 11, Part 2, Chapter I, and remain in effect today.

What then makes up the FORSTAT report, how is it reported, and what is the reporting criteria?

Within the Marine Division, which is the level of command addressed by this research effort, FORSTAT reports originate at the individual battalion, and separate company/battery/platoon/team level,

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[41]Fleet Marine Force Pacific Message, Op. cit. , pp. 2-3.

as well as headquarters companies/batteries of the regiments. As shown in Figure 4, reports are then forwarded through the operational chain of command to the Joint Chiefs of Staff, thus providing readiness information to all levels of command.

Each of the reporting units, identified by the levels just described, are registered in the FORSTAT reporting system with a unique, six character, alphanumeric, Unit Identification Code (UIC). This UIC serves as the prime identifier of that reporting unit and remains with the organization throughout its existence.

The primary reporting medium for all reporting commands is by means of punched cards. FORSTAT detail cards are identified by a one-character code (e.g. card type D, K, etc.). Information submitted by individual reporting units within the FORSTAT system includes readiness data related to the following four distinct areas: (1) general status, (2) personnel status, (3) combat readiness status, and (4) equipment and crew status.

a. What is general status data?

General status data (card types, D, and DM1) include information related to a unit's location, what unit it reports to for administrative and operational control (ADCON/OPCON), the name and rank of the commanding officer and the name and rank of the particular unit FORSTAT coordinator. (See Appendix B). Reports are required when changes occur.
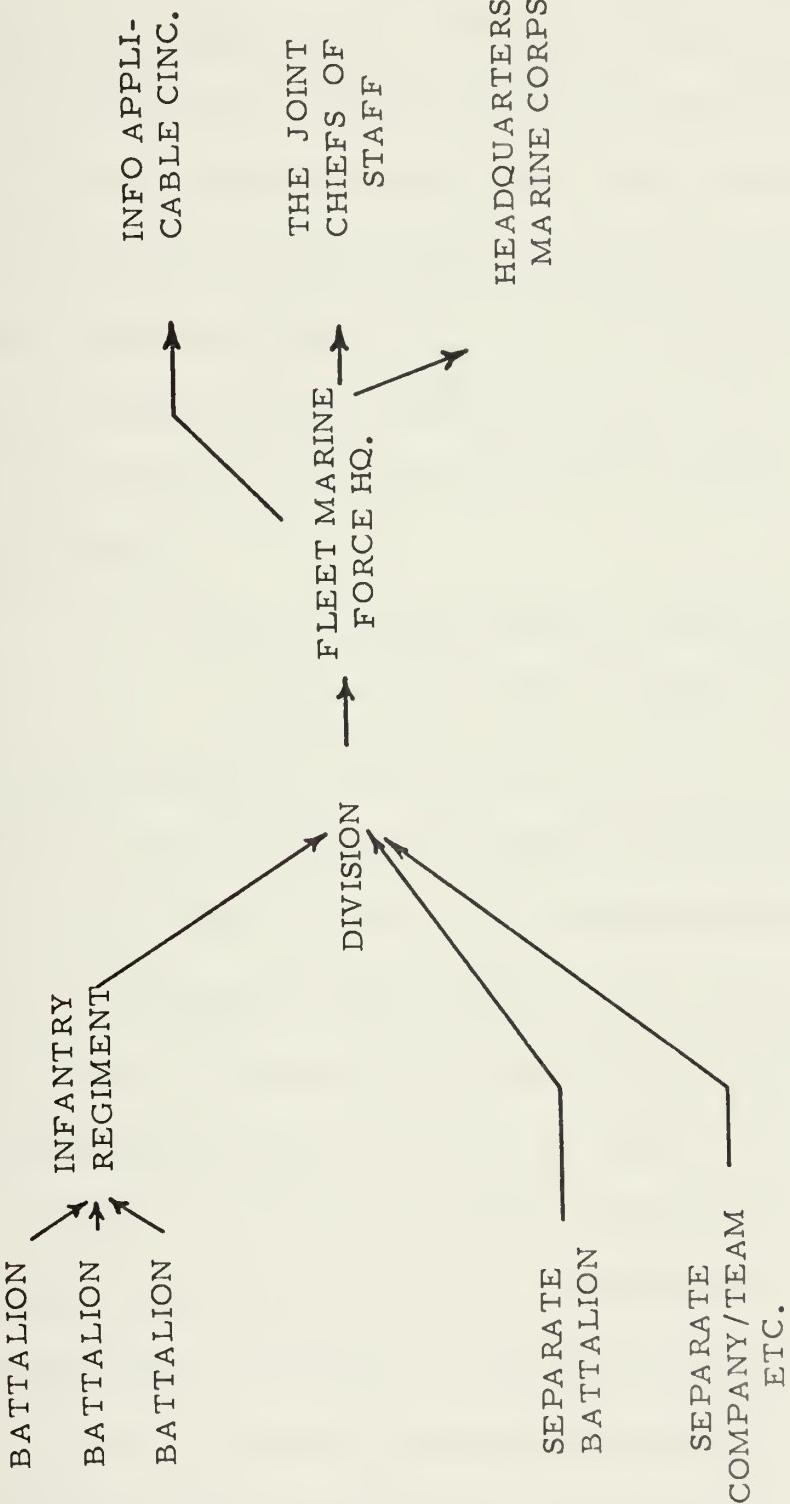
Figure 4. FORSTAT Report Flow

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b. What is personnel status data?

Personnel status data includes the actual personnel strengths of a reporting unit. This information is reported on card types J and JM1. (See Appendix B). The required personnel readiness information includes, among other items, structured, authorized, assigned, and possessed strengths for Marine commissioned, Marine Warrent, Marine enlisted, Navy commissioned, and Navy enlisted. Reports are required upon significant change, when a change of ten percent from the last submission occurs, or on the last working day of each month.

c. What is combat readiness status data?

Combat readiness data (card type K) is the most important of all the FORSTAT cards since it provides a summary of a unit's readiness posture. The combat readiness reported is a measure of a unit's overall ability to perform its assigned combat mission. Criteria has been established to place a unit in a C-1, C-2, C-3, or C-4 readiness category, (C-ratings to be identified later within this chapter). When submitting this readiness information, a unit will establish a C-rating for each of four categories: personnel, equipment/supplies on hand, equipment readiness, and training. In addition an overall C-rating is established for the unit plus a forecast of any anticipated changes in readiness posture. Reports are required as changes occur, when a forecasted change date expires, or on the 15th of every other month. (See Appendix B).

d. What is equipment and crew status data?

Equipment and crew status information (card types L and M) include the readiness status of major equipment authorized and/ or possessed by registered reporting units or organizations and the related status of crews formed and ready to man this equipment. Generally, information reported on major equipment is related to: (1) type, (2) quantity operationally ready, (3) location if different than home station, and (4) numbers of crews authorized, formed and ready. Reports related to major equipment information are required when changes occur. (See Appendix B).

e. How are amplifying remarks submitted?

In addition to the above, one additional card (type R) is provided to allow a reporting unit to include information in amplification of any section of that unit's FORSTAT report. (See Appendix B). This is accomplished by means of general remarks submitted on the R-card which accompany the remainder of the unit's readiness report submission. R-card reports are required when: (1) a unit has been placed in a cadre status by a higher authority, (2) when a unit commander desires to rate his unit at a readiness level not supported by established C-rating percentages, or (3) when amplification/justification of any part of the unit's FORSTAT report submission is desired/required.

f. What is the reporting criteria?

Combat readiness reporting criteria (C-ratings) for Marine Corps units have been established for the four resource areas, personnel,

equipment/supplies on hand, equipment readiness, and training. In

addition reporting crieteria has also been established for an overall

composite readiness rating. These C-ratings are used when reporting

on card type K.

Marine Corps organizations are designed to accomplish

the primary Marine Corps mission of service with the fleet in seizure or

defense of advance naval bases and for the conduct of those land opera-

tions that may be considered essential to the prosecution of a naval cam-

paign. Combat readiness is measure against this requirement and includes

the evaluation of the readiness status of all assets required to accomplish

a specified mission. In addition, readiness reporting criteria specifies

that reporting, related to the four measured resource areas and the

overall combat readiness rating, will be based on official Marine Corps

"Tables of Organization" (T/O's) and "Tables of Equipment" (T/E's)to

insure uniform readiness evaluation and reporting procedures throughout

the Marine Corps.

A detailed outline of the FORSTAT readiness reporting

criteria is provided in Appendix C. (See Appendix C).

FORSTAT, then, is the acronym for "Joint Chiefs of

Staff Force Status and Identity Report." It is one of several reports that

provide timely and accurate information to the National Command Author-

ities, the Joint Chiefs of Staff, the Services, the CINC's unified and

specified commands, and commanders within operational chains.

2.   The Marine Automated Readiness Evaluation System (MARES)

As indicated at the beginning of this chapter, the "Marine Automated Readiness Evaluation System (MARES)" was originally a part of the "Marine Corps Operational Effectiveness Reporting System" along with the FORSTAT Report.

The MARES readiness reporting system also became operational on November 1, 1968, along with the FORSTAT report and provided the detailed logistic readiness data necessary to complete the overall readiness evaluation of a reporting unit.

Whereas FORSTAT is utilized in all branches of the Armed Services and is centrally controlled by the Joint Chiefs of Staff, MARES is utilized just within the Marine Corps to report detailed status of readiness in the areas of equipment/supplies on hand and equipment readiness. Thus it can be seen that the MARES readiness reporting system supports the FORSTAT reporting system, in that the MARES provides additional detailed logistic information related to two of the four measured resource areas identified in the FORSTAT report.

The MARES reporting system was born as a readiness information system with the objective of closely supporting the FORSTAT system required by the Joint Chiefs of Staff. However, it was gradually realized that the MARES system served as an excellent means of identifying specific equipment maintenance and supply problems within the Marine Corps. Thus MARES has gradually evolved into an independent reporting system in its own right. As with the FORSTAT System, on

29.February 1972, the MARES was no longer a part of the "Marine Corps Operational Effectiveness Reporting System" but rather stood alone as a Marine Corps unique logistics readiness reporting system. This arrangement of two independent, but intimately related, parallel readiness reports exists today.

From the above, it can be seen that under these two reporting systems, (FORSTAT and MARES), lower level Marine Corps reporting units submit total and detailed readiness information through two separate systems. One, through FORSTAT to the Joint Chiefs of Staff with information copies provided to Headquarters Marine Corps, and two, through the MARES System directly to Headquarters Marine Corps where the detailed information can then be provided to the Joint Chiefs of Staff or other interested parties in the extent or detail that the Marine Corps judges appropriate.

The "Marine Automated Readiness Evaluation System (MARES)" has considerable potential as a management tool throughout all echelons of the Marine Corps. The key words in this title are "Readiness" and "Evaluation." MARES can provide an accurate picture of a unit's material "readiness," and if the picture is sufficiently accurate, the system can be an excellent source of information for evaluating the courses of action necessary to improve a unit's material readiness. In this regard the system can aid unit commanders, at all levels, in the decision making process by identifying problem areas requiring command attention.

a. What makes up the MARES Report?

Basically the MARES system utilizes three card types to report a unit's readiness condition. The three card types used are LM1, LM2, and RM4. (Note that the MARES system utilizes a three digit card type code, whereas the FORSTAT utilized a two digit code).

b. Supply Status Report - LM1 Card.

The purpose of the supply status report is to provide Headquarters Marine Corps and intermediate level Marine Corps commanders with information on the requisition status related to the "table of equipment" deficiencies of combat essential equipment within a unit and identification of those critical requisitions necessary to bring a unit to a C-1 supply and equipment readiness status. The LM1 card is not a requisition but simply identifies the requisitions that have been submitted by a reporting unit. Submission of this information is required on a daily basis. (See Appendix D).

c. Equipment Status Report - LM2 Card.

The purpose of this MARES data is to provide Headquarters Marine Corps and intermediate commanders with information on the status of combat essential equipment. This report reflects authorized and possessed amounts plus the status of deadlined combat essential equipment. The report is submitted daily to (1) initiate reporting on new items of combat essential equipment and (2) to report an item of combat essential equipment to or from deadline or to change the status of the deadlined equipment. (See Appendix D).

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d.   MARES Logistics Remarks - RM4 Card.

The purpose of the MARES logistics remarks are to pro-
vide Headquarters Marine Corps and intermediate commands with nar-
rative comments related to the Supply Status Report - LM1, and the
Equipment Status Report - LM2 submissions. These reports are sub-
mitted daily as required. (See Appendix D).

e.   General Comments Regarding MARES System.

The relationship of the MARES system to the FORSTAT
report is in the areas of supplies/equipment on hand and equipment read-
iness (two of the resource areas measured by the FORSTAT report). The
C-ratings for these two categories are determined in accordance with the
criteria identified in Appendix C for the FORSTAT report. Therefore,
whereas the FORSTAT reflected a unit's C-rating in the four resource
areas, the MARES provides, on a unit-by-unit, item-by-item basis, the
amounts of reportable equipment authorized, possessed, and deadlined.

The MARES logistic reporting system, then, is a method
utilized by the Marine Corps to report detailed status of equipment and
supplies, and equipment readiness information.

3.   Readiness Reporting Procedures

The purpose of this section is to look at how readiness infor-
mation is collected, processed and transmitted within the Marine Corps
utilizing the FORSTAT and MARES reporting systems. The scope of this
section is limited to a discussion of those procedures applicable to a
typical Marine division. As an example of reporting within a typical

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Marine division, the following paragraphs reflect practices now in operation within the 1st Marine division.

      a.   Information Collection Procedures within the Marine Division

Within the Marine division readiness information is collected by means of the FORSTAT and the MARES reporting systems. In both cases readiness information originates at the individual unit/ organization reporting level. Reporting units at this level include individual battalions and separate companys/batteries/platoons/teams as well as the headquarters companies/batteries of the regiments.

Concerning the FORSTAT side of readiness reporting, each reporting unit/organization within the Marine division has designated two unit FORSTAT coordinators, one officer and one enlisted, who prepare the report, obtain approval of the commanding officer, and, then, hand carry it to the division headquarters. A report submission may consist of one or all of the FORSTAT data cards discussed earlier.

Regarding the MARES reporting procedures, each reporting unit/organization has assigned one officer and one enlisted man with the duties of MARES officer and MARES clerk respectively. As with the FORSTAT report, these personnel, in each reporting unit, develop the MARES report in accordance with higher level directives, obtain approval for submission from the unit commanding officer, and hand carry the report to the division headquarters.

The most important aspect of the reporting step, is the

accuracy and quality of the information reported. Commanding officers of reporting units are continually enjoined to insure that information reported under both the FORSTAT and MARES systems is as accurate as humanly possible within the time constraints involved.

b.   Processing of Readiness Information within the

Division Headquarters

Concerning the processing of FORSTAT readiness information, all input data is centrally accumulated by the Division FORSTAT Officer. Upon receipt of the input, all data is checked for accuracy and format. Any errors are noted and compiled for subsequent publication in a monthly error rate listing. All input information is then key punched on computer cards and assigned the appropriate security classification. A complete unit FORSTAT report, containing detailed readiness data, is classified SECRET. Following conversion of the input to computer cards, a "recap" of significant changes contained in the current report plus a summary of the readiness status of each reporting unit is routed through the division staff for approval. Following concurrence by all key staff officers, the report is signed by the Assistant Chief of Staff G-3, for release. The approved deck of input cards is then processed by an IBM 360 computer which processes the report through 11 audit/edit programs to insure accuracy. At this point the Division FORSTAT Officer delivers the approved report to the Division Communication Center for release to higher headquarters.

Processing of MARES reports at the division level is

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similar to those described above for the FORSTAT report. Since MARES reports are submitted daily, it becomes a daily responsibility of the Division MARES action officer and his staff to screen all input for accuracy and completeness. All reporting errors are resolved immediately by telephone calls or conferences between the appropriate unit commanders and the division representatives. When the input has been determined to be accurate it is converted to punched computer cards, processed through an error/edit procedure, approved for release and delivered to the Division Communications Center for transmission.

       c.   Transmission of Readiness Information by Division

      The primary method of transmitting FORSTAT and MARES readiness information is by means of the World Wide Automatic Digital Network (AUTODIN). FORSTAT information is reported through designated reporting channels and terminates at the Alternate National Military Command Center (ANMCC) for use by the Joint Chiefs of Staff. MARES reports are also submitted via AUTODIN but terminate at Headquarters Marine Corps. Under special circumstances (deployment etc.) where a reporting unit does not have access to AUTODIN capabilities, reports can be submitted by teletype or message.

       4.   Complexity of Readiness Systems Review

      It has not been the intent of this chapter to provide a detailed review or outline of Standing Operating Procedures for individual unit reporting under the FORSTAT and MARES readiness reporting systems. The main intent has been to provide sufficient background, concerning

these two complicated, centrallized, readiness reporting systems to support later analysis concerning their impact upon the U. S. Marine division.

IV. IMPACT OF CENTRALIZED READINESS REPORTING SYSTEMS UPON THE U. S. MARINE DIVISION, AS A BUREAUCRATIC ORGANIZATION

From the beginning of his social existance, man has had to depend upon organizations. As man progressed up the scale of civilization his dependence upon organizations also increased. Contemporary man now finds the organization a primary determanant of his social existence.[42]

Addressing the third and final aspect of the model presented in Chapter I, this chapter will examine the U. S. Marine division as a bureaucratic organization and analyze the effect of centralized readiness reporting systems upon its operation. The analysis presented in this chapter reflects research data which was compiled by means of (1) analysis and review of applicable studies, professional literature and official documents, (2) extensive interviews with appropriate Marine personnel, (3) observation of current operating procedures, and (4) recollections based upon the author's personal experience at the Marine division level.

To properly address the impact of centralized, computerized, readiness information reporting systems, upon the Marine division, it is first necessary to briefly discuss organization theory and examine how

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[42]Whyte, William H. Jr., The Organization Man, Garden City, N.Y.: Doubleday Anchor Books, 1956, pp. 1-15.

the Marine Corps, as an organization, reflects certain aspects of classical and contemporary theory. To accomplish this, the first portion of this chapter will be devoted to a discussion of the Marine Corps as it represents a bureaucratic organization. The remainder of the chapter will then address the Marine division, as a part of a larger Marine Corps bureaucracy, and identify the various impacts of centralized readiness reporting systems.

A.   THE MARINE CORPS AS A BUREAUCRATIC ORGANIZATION

1.   Organization Theory

The term organization is here defined as "a form of social grouping which is established in a more or less deliberate or purposive manner for the attainment of a specific goal."[43] In the above definition, the words purposive and goal are significant since it is organizations that provide the necessary structure whereby man, in a purposive manner, can coordinate his activities and efforts in order to achieve a specific goal.

Organizations can be described as formal or informal depending upon their structure and purpose.[44] This chapter will only address formal organizations, as they can be related to the U. S. Marine Corps.

The study of formal organizations, as those deliberately established to accomplish a certain purpose, should begin with Max Weber. Weber was the first serious writer to analyze the development and

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[43] Mouzelis, Op. cit., p. 4.

[44] Blau, Op. cit., pp. 2-8.

character of the bureaucratic organization. The product of his analysis is known in the literature, as the "Weberian Model."

The development of bureaucratic organization theory actually grew out of an effort by Weber to define authority structures or relationships within organizations.[45] The three types of authority identified by Weber included (1) the charismatic, (2) the traditional, and (3) the rational-legal. It was this third type of authority system, the rational-legal system, that was seen by Weber as the dominant institution of modern society. For this system Weber used the term bureaucracy. He considered the system to be rational because the organization functions like a well designed machine with a certain function to perform and every part of the machine contributes to the attainment of that function. The system is considered legal because authority is exercised by means of a system of rules and procedures through a particular office which is occupied by an individual at a particular time.[46]

Weber felt that a bureaucratic organization is technically the most efficient form of organization possible because precision, speed, unambiguity, knowledge of files, continuity, discretion, unity, strict reduction of friction, and reduction of material and personal costs are all

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[45]Weber, Max, The Theory of Social and Economic Organizations, Glencoe, Ill.: The Free Press, 1947, pp. 324-382.

[46]Pugh, D. S., Hickson, D. J. and Hinings, C. R., Writers on Organizations, Middlesex, England: Penquin Books, 1971, p. 18.

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raised to the optimum point in the strictly bureaucratic administration.

The reason for the efficiency of the bureaucracy, as seen by Weber, lies in its organizational form. He enumerated the distinctive characteristics of this type of organization as follows:

"1. Clear-cut division of labor. Organization tasks are distributed among the various positions as official duties. Implied is a clear-cut division of labor among positions which make possible a high degree of specialization. Specialization, in turn, promotes expertness among the staff, both directly and by employees on the basis of their technical qualifications.

2. Hierarchical authority structure. The positions or offices are organized into a hierarchical authority structure. In the usual case this hierarchy takes on the shape of a pyramid wherein each official is responsible for his subordinate's decision and actions as well as his own to the superior above him in the pyramid and wherein each official has authority over the officials under him. The scope of authority of superiors over subordinates is clearly circumscribed.

3. Formal rules and regulations. A formally established system of rules and regulations governs official decisions and actions. In principle, the operations in such administrative organizations involve the application of these general regulations to particular cases. The regulations insure the uniformity of operations and, together with the authority structure, make possible the coordination of the various activities. They also provide for continuity in operations regardless of changes of personnel, thus promoting a stability lacking in charismatic movements.

4. Impersonal orientation. Officials are expected to assume an impersonal orientation in their contacts with clients and with other officials. Clients are to be treated as cases, the officials being expected to disregard all personal considerations and to maintain complete emotional detachment, and subordinates are to be treated in a similar impersonal fashion. The social distance between hierarchical levels and between officials and their clients is intended to foster such formality. Impersonal detachment is designed to prevent the personal feelings of officials from distorting their rational judgment in carrying out their duties.

. **5.** Career oriented employees. Employment by the organization constitutes a career for officials. Typically an official is a full-time employee and looks forward to a lifelong career in the agency. Employment is based on the technical qualifications of the candidate rather than on political, family or other connections. Usually such qualifications are tested by examination or by certificates that demonstrate the candidate's educational attainment. Such educational qualifications create a certain amount of class homogeneity among officials. Officials are appointed to positions, not elected, and thus are dependent on superiors in the organization rather than on a body of constituents. After a trial period officials gain tenure of a position and are protected against arbitrary dismissal. Renumeration is in the form of a salary, and pensions are provided after retirement. Career advancements are made according to seniority, or achievement, or both."[47]

Since the articulation of the Weberian bureaucratic organization model, a number of other writers have also addressed the topics of bureaucracy and organizational theory. Significant among these has been F. W. Taylor, H. Foyal, L. Gulick, M. P. Follet and R. K. Merton. Briefly reviewing the contribution of each of these writers, the first, Taylor focused upon the basic physical activities involved in production in an effort to identify the most efficient utilization of the human organism in the productive process.[48] Known as the theory of scientific management, Taylor's contributions have had a significant impact upon the field of organization theory.

Building upon the Taylorian concepts, Foyal attempted to extend this rational type thinking from the plant level to the firm as a whole. Foyal's main contribution was an effort to develop a set of general principles

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[47] Blau, Op. cit., pp. 32-33.

[48] March, Op. cit., pp. 12-21.

concerning how to build and manage an efficient organization.[49]

As another significant contribution to organization theory, Gulick developed a theory regarding the identification and departmental- ization of the individual tasks necessary to achieve a given purpose. As Gulick envisioned it, the problem was to group related tasks into individual jobs, group jobs into administrative units, group units into larger units, and finally to superimpose top level departments over the larger units.[50]

Of the two additional writers making significant contributions to organizational theory, Follet addressed the concepts of joint responsi- bility and multiple leadership as an alternative to the strict chain of com- mand existing in a bureaucratic structure.[51] As the remaining writer indicated above, Merton's main contribution was to identify certain negative aspects of bureaucracy including the lack of flexibility inherent in a bur- eaucratic organization.[52]

The contribution of the above social scientists and other writers has not detracted from the tremendous influence of Weber's ideas upon organization theory. The bureaucratic organization, in Weber's view, maximizes rational decision-making and administrative efficiency because disciplined performance by experienced, qualified experts who are governed

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[49]Mouzelis, Op. cit., pp. 4, 201-202.

[50]March, Op. cit., pp. 22-25.

[51]Pugh, Op. cit., pp. 102-104.

[52]Mouzelis, Op. cit., p. 55.

by abstract rules and coordinated by the authority hierarchy, contributes

to the rational and consistent pursuit of organizational objectives.

    2.   The Marine Corps and Bureaucratic Organization Theory

        As a mission oriented organization the Marine Corps is a

formal organization in accordance with the goal directed criteria. As a

formal organization, established and structured by law, the Marine Corps

can also be viewed as an organization which demonstrates the general

characteristics of the rational-legal or bureaucratic organization des-

cribed by Weber.

        An analysis of the Marine Corps, and comparison against the

characteristics of Weber's bureaucratic organization, supports the ident-

ification of the Marine Corps as a bureaucracy. In this regard the Marine

Corps is hierarchical authority structure, one of the characteristics

identified by Weber, since it was established as a military organization

with a defined structure.[53] In addition a clear-cut division of labor exists

within the Marine Corps organization, as demonstrated by the assignment

of Military Occupational Speciality (MOS) codes to all Marines, which

effectively limits the assignment of individuals to certain general areas of

service. Also a formal table of organization (T/O) has been established,

for every unit in the Marine Corps, with a separate line number established

for each type of billet. Formal rules and regulations control the activities

of individual Marines ranging from the control exercised by the Uniform

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[53]Thomas, Op. cit., pp. 39-40.

Code of Military Justice (UCMJ) to the use of Standing Operating Proced-
ures (SOP's) by individual units. An impersonal relationship between
members at different levels in the hierarchy is also stressed and many
individual members, both officer and enlisted, see employment as con-
stituting a career.

3.   Significance of Analyzing the Marine Corps Against
      Bureaucratic Organization Theory

The purpose of analyzing the Marine Corps against bureaucratic
organization theory is the fact that centralization within formal organiza-
tions, including the bureaucratic organization, has traditionally resulted
in certain advantageous or disadvantageous impacts upon the organization.
It is that specific aspect that will be addressed in the balance of this chapter.
What has been the impact of centralized readiness reporting systems upon
the U. S. Marine division, as a bureaucratic organization?

B.   ORGANIZATIONAL IMPACT, OF CENTRALIZED READINESS
      REPORTING, WITHIN THE MARINE DIVISION

Although numerous centralized reporting systems are now in use by
the Marine Corps, none have had the impact upon the operational units,
such as the Marine divison, as have the readiness reporting systems. Con-
cerning this impact, one of the general areas affected has been organiza-
tional, as it relates to both structural changes and increased man-hour
requirements. Reflecting extensive interviews with 1st Marine Division
personnel, each of these organizational related areas is discussed below
in terms of the changes that have occurred. These changes were determined

by comparing conditions in the Marine division as they existed before and after the establishment of centralized readiness reporting systems.

1.   Structural Changes

Prior to implementation of the FORSTAT and MARES reporting systems within the Marine Corps, the 1st Marine Division had only one officer, a major, assigned to develop and report unit readiness data under the old Operational Status (OPSTAT) reporting system. This officer was assigned as an operations officer in the Assistant Chief of Staff, G-3 office and had the assignment of readiness reporting officer as an additional duty. The designated officer assembled readiness information from various internal division message reports and developed a message type readiness report for release by the command.

During the period when the OPSTAT reporting system was utilized within the division, the division headquarters was structured in the typical form shown in Figure 5. Certain aspects of that headquarters staff structure can be contrasted with the current 1st Marine Division organizational structure established in response to and as a result of the FORSTAT and MARES reporting requirements.

In response to, and as a result of, the FORSTAT and MARES reporting requirements one of the most significant organizational changes has been the establishment of a Division Combat Readiness Central/Management Analysis Section, under the staff cognizance of the Assistant Chief of Staff, G-3.

The Division Combat Readiness Central (DCRC) portion of this
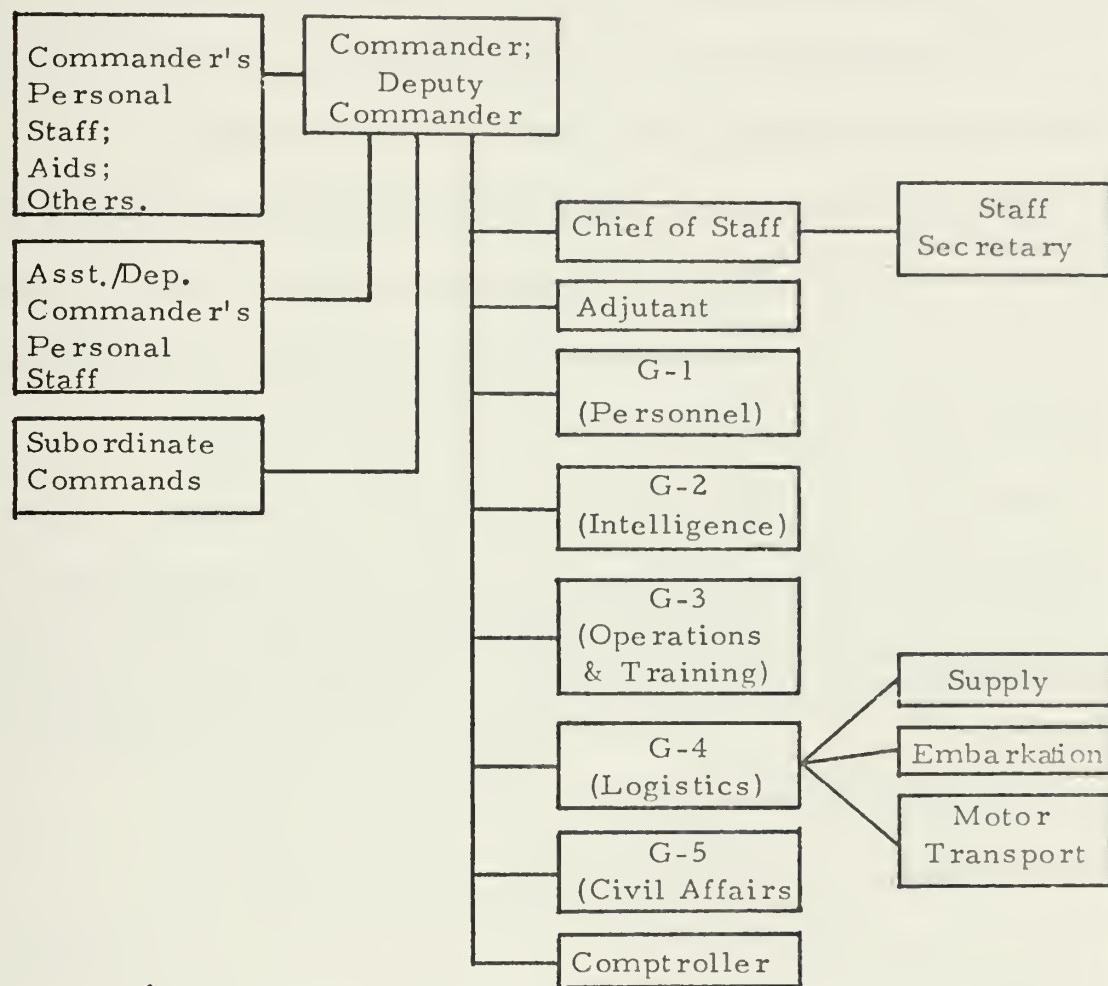
Figure 5. Typical Marine Division Headquarters
Structure

new structure was established to provide the Commanding General with timely accurate information concerning the combat readiness status of the 1st Marine Division and to establish centralized coordination and control over readiness reporting systems, primarily FORSTAT.

Subordinate to the new Division Combat Readiness Central, is the Management Analysis Section. This section was established to coordinate the collection and presentation of management data to support established division management analysis procedures.

The stated mission of the new Division Combat Readiness Central, including the Management Analysis Section, is as follows:

"The mission of the DCRC is to assist the Commanding General, Division Staff, and subordinate Commanding Officers, in coordinating programs designed to maintain a high state of combat readiness within the 1st Marine Division and to provide for the collection and presentation of associated management data."[54]

The functions inherent in the mission of the DCRC are:

a. Centralize the control of FORSTAT readiness reporting systems.

b. Provide a focal point for the collection, recording, analysis, and display of data related to the combat readiness of the 1st Marine Division.

c. Develop, coordinate and maintain a division readiness briefing and decision making system titled "The Division Program Progress

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[54]1st Marine Division, 1st Marine Division Combat Readiness Central/Management Analysis Section, 1st Marine Division Order 3000.12A, Camp Pendleton, Calif.: 1st Marine Division, 1972, pp. 1-2.

Report System" (to be discussed later in this chapter, as it relates to decision making).

     d.   Establish and coordinate the activities of a Division Combat Readiness Committee for the purposes of developing and reviewing the readiness posture of reporting units. (To be discussed later in this chapter as it relates to decision making).

     e.   Coordinate staff actions required to develop and maintain management data for use in the monitoring of readiness related problem areas.

     f.   Maintain liaison with higher and lower headquarters, within the reporting chain, in readiness/management related matters.

     g.   Monitor the existing FORSTAT readiness reporting system and recommend improvements as required.

     As an addition to the division structure, this new Division Combat Readiness Central/Management Analysis Section has been added to the division organizational diagram, shown in Figure 5, and is located under the staff cognizance of the Assistant Chief of Staff, G-3. The internal structure is as shown in Figure 6.

     The requirement to staff this new addition to the division structure has also altered the assignment of personnel within the division headquarters. Originally, prior to the FORSTAT system, readiness reporting requirements were simply an additional duty. However, the complexity of the new readiness reporting system dictated a permanent change in the staff structure and the assignment of responsible personnel on a full

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            ┌─────────────────────┐
            │   Assistant Chief    │
            │   of Staff, G-3      │
            └──────────┬──────────┘
                       │
        ┌──────────────┴───────────────────────┐
        │  Division Combat Readiness Central/    │
        │   Management Analysis Section          │
        └──────────────┬───────────────────────┘
               ┌───────┴───────────────┐
    ┌──────────┴──────┐       ┌────────┴──────────────┐
    │   FORSTAT       │       │  Management Analysis   │
    │   Section       │       │      Section           │
    └─────────────────┘       └───────────────────────┘
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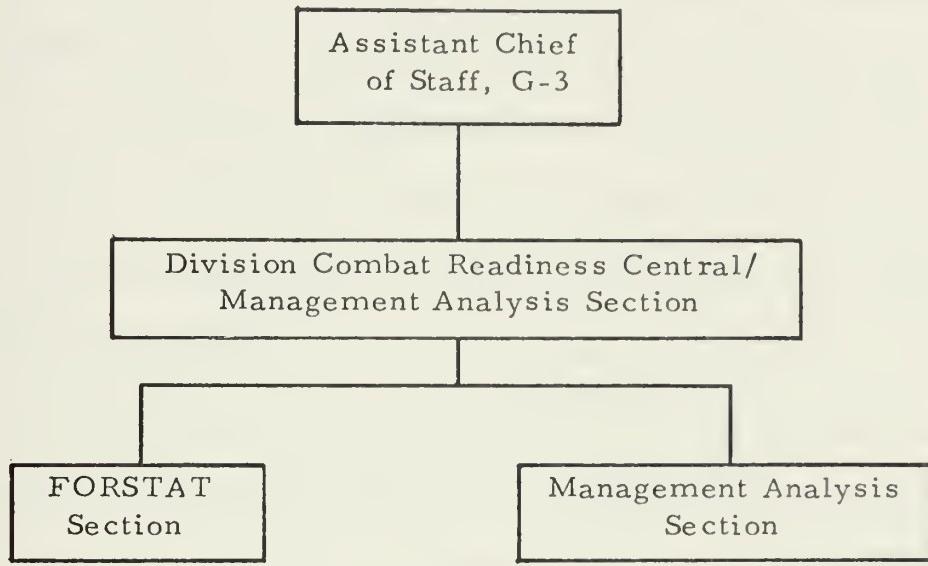
Figure 6.   Addition to Marine Division Headquarters
Structure.

time basis. The manpower requirements are as presented in Table 1. It should be noted that this change in the division staff structure represents a change to the existing table of organization of the division headquarters and therefore dictates some alteration in assignments to insure that the division does not exceed its authorized personnel strength.

By means of a published 1st Marine Division Order (Div. O. 3000.12A) the mission and purpose of the DCRC were officially established, and the related responsibilities of all general and special staff, and subordinate commanding officers were outlined.

Another structural alteration within the division organization has resulted from incorporation of the MARES readiness reporting system. In this case, the change does not involve the establishment of a separate organization under the cognigance of a general staff officer, but rather simply the designation of a separate and additional, area of responsibility directly under the Assistant Chief of Staff, G-4. The Assistant Chief of Staff, G-4, is assigned the additional duty of "Division MARES Officer", and as such is responsible for all division activities related to the MARES readiness reporting system.

To accomplish this additional duty the Assistant Chief of Staff, G-4, has designated a MARES officer and two MARES clerks who are responsible for maintaining the timeliness of MARES submissions and the accuracy of the MARES data base.

In addition to the above, two other structural changes have occurred within the division, as a result of the FORSTAT and MARES

Billet Description	Rank	MOS	Officer	En-listed
Director	Major	9911	1	
Asst. Director	Captain	9910	1	
CRC Operations Chief	M/Sgt	0369		1
Admin Man	L/Cpl	0151		1
FORSTAT Section				
FORSTAT Officer	Lt.	9911	1	
Reports Analyst	M/Sgt	0369		1
FORSTAT Staff NCO	Gy/Sgt	0369		1
FORSTAT NCO/Clerk	Cpl	0151		1
Management Analysis Section				
Coordinator	Capt.	9911	1	
NCO in charge	Sgt	8711		1
Draftsman	Cpl	8771		1
Admin Man/Driver	L/Cpl	0151		1
			4	8

Table 1. Combat Readiness Central Organization

readiness reporting systems. The first of these has been the requirement for the Assistant Chief of Staff, G-1, the Adjutant and the Division Communications Officer to designate a member of their particular staff section to become sufficiently knowledgable regarding the new reporting systems to insure proper coordination during reporting. The second has been at the individual reporting unit level and involves each command designating one officer and one enlisted man with the responsibility of reporting under the FORSTAT system, and an additional officer and enlisted man to report under the MARES system. In both cases designations at the reporting unit level are generally on an additional duty basis.

2.   Man-Hour Requirement Changes

One of the most significant organizational requirement changes resulting from the change to the FORSTAT and MARES system has been the increased man-hours required for readiness reporting.

a.   Man-hour Requirements Directly Related to FORSTAT and MARES reporting

Under the original OPSTAT message type readiness reporting system, the reports were manually developed and staffed by one officer within the division G-3 section. Based upon information obtained by interviews with officers who were present at that time, the approximate monthly OPSTAT reporting man-hour requirements, displayed in Table 2, have been computed.

Under the current FORSTAT and MARES readiness reporting systems a significant increase in man-hour requirements has resulted.

OPSTAT Reporting:

1 G-3 reports officer at approx. 2 days/week
 = 16 hrs/week x 4 weeks -----------   = 64 hrs/mo.

1 clerk typist at approx. 3 hrs/week x 4 wks. = 12 hrs/mo.

Others (coordination, reviews, etc.) at
 approx. 1 hr/week x 4 weeks -------   = 4 hrs/mo.

1 officer or enlisted (develop information at
 reporting unit level) at 1 hr week
 x 4 wks. x 32 units   = 128 hrs/mo.

                    Total Man-Hours/mo. -- = 208 hrs/mo.

Table 2. Monthly OPSTAT Reporting Man-Hours

Table 3 summarizes these Man-Hour requirements. As shown in Table 3, for the FORSTAT reporting system, a total of 2350 man-hours per month are required for the complete development, assembly, coordination and submission of the report. For the MARES report, which is submitted at a higher frequency, a total of 8,288 man-hours per month are required. Combined, a grand total of 10,638 man-hours per month are required for the complete submission of these two centralized readiness reports. Without question these systems represent a considerable increase in manpower requirements and therefore reflect a significant impact upon the manpower requirements of the Marine division.

      b.   Training Requirements

Another significant requirement, affecting the division as an organization, has been the increased requirement for the training and education of all personnel involved in the FORSTAT and MARES reporting systems.

Although this is a Marine Corps wide problem, the scope of this particular study, limits the discussion to the Marine division level.

As a solution to this problem, the 1st Marine Division has implemented a number of new procedures and programs. Among these, relating to FORSTAT, has been the development of a Commander's Guide to FORSTAT reporting, a FORSTAT Programmed Instruction Booklet, a FORSTAT Unit Level Coordinator's Orientation Handout, and a four hour formal FORSTAT training program. The training program provides an indoctrination into the complexities of FORSTAT reporting and insures

<u>FORSTAT</u>

<u>Reporting Unit Level</u>

1 officer/ 1 enlisted at 6 hrs/week for sub-
    mission x 4 wks/mo. x 1 man --------------   = 24 hrs/mo.

1 officer/ 1 enlisted at 1 hr/week for Report,
    Reconciliation x 4 wks/mo. x 1 man --------   = 4 hrs/mo.

Transportation to division; 1 hr/submission
    x 4 submission/week x 4 wks/mo. ---------   = 16 hrs/mo.

Delivery at Division; 1/2 hrs/submission
    x 4 submission/week x 4 wks/mo. ---------   = <u> 8 </u>hrs/mo.

                             Sub-total----   = 52 hrs/mo.

    Total; with 32 Reporting Units; 32 x 52 ---   = 1664 hrs/mo

<u>Division Level</u>

1 officer & 1 enlisted; check input;
    2 men x 1/2hr/unit x 4 submissions/
    week x 32 units x 4 wks/mo. --------------   = 512 hr/mo.

1 enlisted; key punch new info.;
    3 hrs/day x 5 days/week x 4 wks/mo. ------   = 60 hr/mo.

1 enlisted; develop recap sheet;
    1/2 hr/day x 5 days/week x 4 wks/mo. ----   = 10 hr/mo.

1 enlisted; coordination & delivery to
    Computer Center;
    1/4 hr/day x 5 days/week x 4 wks/mo. ----   =   5 hr/mo.

1 officer & 2 enlisted; run report;
    3 men x 1-1/2 hr/day x 5 days/
    week x 5 wks/mo. ---------------------   = 90 hr/mo.

1 enlisted; deliver report to Comm. Center;
    1/4 hr/day x 5 days/week x 4 wks/mo. ---   =   5 hr/mo.

1 officer; Briefings for General & Special
    Staff; 4 hrs/mo. ---------------------   = <u> 4 </u>hr/mo.

                               Total ----   = 686 hr/mo.

    FORSTAT Overall Total Man-Hours/Mo. --   = 2350

Table 3. Monthly FORSTAT/MARES Reporting Man-Hours

MARES

Reporting Unit Level

1 officer & 1 enlisted; Submission &
    Reconciliation;
    28 hrs/wk. x 4 wks/mo. x 2 men ---------   = 224 hrs/mo.

Transportation to Division; 1 hr/submission
    x 5 submissions/week x 4 wks/mo. -------   = _20 hrs/mo.

                                    Sub-total ---   = 244 hrs/mo.

        Total; with 32 Reporting Units; 32 x 244---   = 7808

Division Level

1 officer & 2 enlisted; (Review, Assembly,
    Coordination & submission of Report;
    3 men x 8 hrs/day x 5 days/week
    x 4 wks/mo. --------------------------   = 480 hrs/mo.

    MARES Overall Total Man-Hours/Mo. ----   = 8288

    Combined Total FORSTAT and MARES ----   = 10,638
                                                    man/hrs/mo.

        Table 3 Continued.   Monthly FORSTAT/MARES
                    Reporting Man-Hours

that reporting unit commanders have qualified personnel within their units to compile, evaluate, and submit timely and accurate FORSTAT reports.

On the MARES side of the readiness reporting system, the division has published a Standing Operating Procedure for MARES reporting, has developed and promulgated a MARES Unit Commander's Reference Guide, and also provides a unit level training program as required.

c.   Inspections

As with any centrally controlled system, a continuing requirement also exists for through, detailed procedural inspections at various levels within the reporting chain of command.   In this respect, announced, scheduled inspections are conducted periodically throughout the year.   Beginning at the lowest level, each quarter of the fiscal year, the Division FORSTAT Officer and the Division MARES Officer conduct formal inspections of the division reporting units.   These inspections are always announced and involve the evaluation of the procedures used at the reporting unit level as compared to a published check-off list.   These inspections are designed to correct any reporting problem areas that could conceivably hamper accurate and timely readiness reporting.

In addition, on an annual basis, all reporting divisions are inspected by the appropriate Fleet Marine Force Headquarters plus a team from Headquarters Marine Corps.

From the above, then, it can be seen that another impact of the centralized readiness reporting systems has been the additional

man-hours and effort required to either prepare for or conduct inspections within the Marine division.

C.   IMPACT OF CENTRALIZED READINESS REPORTING

SYSTEMS UPON DECISION MAKING WITHIN THE

MARINE DIVISION

The development and utilization of a centralized readiness informa-tion reporting system will generally have an impact upon organizational decision making because of the increased availability of management in-formation.[55]   To examine that aspect, this section will provide a brief review of applicable decision making theory followed by a discussion of the observable impacts upon decision making at the Marine division level, as a result of centralized readiness reporting systems.

1.   Applicable Decision Making Theory

A survey of contemporary literature on the subject of decision theory reveals a plurality of opinion as to the natural character and applic-ability of this field to the task of management.[56]   This heterogeneous nature however ought not be interpreted as a reflection of the importance of decision theory but rather it is an indication of its novelty and complexity.

[55]Sollenberger, Dr. Harold M., Major Changes Caused by the Implementation of a Management Information System, New York: National Association of Accountants, 1973, p. 1.

[56]Greenwood, William T., Decision Theory and Information Systems. Cincinnati, O.:   South-Western Publishing Co., 1969, pp. 37-38.

Research of decision making literature has resulted in five major findings that are either common to most decision theories or con- . stitute major changes in existing decision theories and practices.[57] First, at higher levels of larger organizations possessing the necessary capabilities, systems analysis and systems models are generally found to be the common denominator of most modern decision processes. Secondly, information is found to be the primary ingredient upon which all types of problem solving and decision making processes depend. Third, current theory now recognizes the existence of subdecisions as an integral part of the complete problem-solving and decision making process, rather than viewing decision making as simply a final decision choice at the end of the problem-solving sequence. Fourth, current theory also recognizes the trend toward an increased use of logic or systematical analysis in decision making as compared to a more intuitive approach which was used in the past. Fifth, there is an increasing requirement within organizations, for middle management staff personnel who are qualified and capable of sound decision making within today's complex organizational structures.

For purposes of this study the only facet of decision making theory that will be addressed in any detail is that of rational decision making within the organizational structure. Rational decision making as discussed by J. G. March and H. A. Simon is applicable to this discussion since it is generally representative of the decision making conditions experienced by

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[57]Ibid, pp. iii-iv.

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the Marine division commander utilizing his general and special division staff members.[58] March and Simon identify four characteristics of the environment in which rational decision making is conducted. These include:

a. In the decision making situation the decision maker has developed a set of alternatives from which he will choose his action.

b. To each alternative is attached a set of consequences or events that will ensue if that particular alternative is chosen. In this regard three categories of consequences exist. These categories are, (1) certainty, where it is assumed that the decision maker has complete and accurate knowledge of the consequences that will follow each alternative, (2) risk, where an accurate knowledge of the probability distribution related to the consequences of each alternative is assumed, and (3) uncertainty, where the decision maker cannot assign definite probabilities to the occurrence of particular consequences.

c. Before making the decision, the decision maker has a preference-ordering that ranks all sets of consequences from the most preferred to the least preferred.

d. When making the decision, the rational decision maker selects the alternative leading to the preferred set of consequences. In the case of certainty, the choice is clear and unambiguous. In the case of risk, the rational decision maker selects the alternative with the greatest expected utility. For the case of uncertainty, the rational decision maker will base

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[58]March, Op. cit., pp. 137-138.

his decision upon a particular decision criteria (e.g. maximizing the minimum possible gain, minimizing the maximum possible loss, etc.)[59]

Organizational decision making is a complex activity, especially in cases of uncertainty or risk. Under any condition, however, the decision maker may utilize techniques ranging from pure intuition to an analytical approach like system analysis. Systems analysis being defined as:

"A systematic approach to helping a decision maker choose a course of action by investigating his full problem, searching out objectives and alternatives, and comparing them in the light of their consequences, using an appropriate framework -- insofar as possible analytic -- to bring expert judgment and intuition to bear on the problem."[60]

Although rational decision making, as defined by March and Simon, generally reflects the decision making process carried out in the Marine Corps organizational environment, there are a number of other influences affecting decision making at the Marine division level. In addition to the constraints of time, money, limited manpower, etc., decision making in the Marine division is also influenced by the fact that the division is a bureaucratic organization and therefore subject to the characteristics of bureaucratic decision making. These characteristics include a

[59]Bierman, H., Bonini, C. P. and Hausman, W. H., Quantitative Analysis for Business Decisions, Homewood, Ill.: Richard D. Irwin, Inc., 1973, pp. 70-71.

[60]Quade, E. S. and Boucher, W. I., Systems Analysis and Policy Planning Applications in Defense, New York: American Elsevier Publishing Co., Inc., 1968, pp. 2, 31 and 425.

standardized, rigid, repetitive approach to decision making generally

resulting in a predictable, straight-forward, impersonal organizational

response.[61]

Reflecting the above brief review of applicable decision making

theory, the balance of this section now addresses the specific, observable

impacts upon decision making, at the Marine division level, as a direct

result of utilizing centralized readiness reporting systems.

2.   Impact Upon Decision Making at the Marine Division Level

a.   The Division Program Progress Report System (DPPRS)

The development and utilization of the FORSTAT and MARES

readiness reporting systems has provided the Marine Corps with a vast

amount of constantly changing readiness information designed for use in

high level decision making. To adequately collect, process and present

this information along with other related information, each headquarters

from Headquarters Marine Corps down to the division level utilizes a man-

agement information system. At the headquarters level this system is titled

the "Marine Corps Program Progress Report System", (MCPPRS).

This progress report system consists of periodic, de-

tailed, formalized briefings to a commander and his staff, in selected

subject areas, with all information maintained and updated in a report

booklet. At the Headquarters Marine Corps level this system provides

information on programs relating to the nine subject areas of readiness,

[61]McNallen, Op. cit. , pp. 4-8.

aviation, manpower, logistics, supply, financial, reserve, research and development, and system development. This information is presented to assist the Commandant, Headquarters Staff and selected field commanders in control, planning and decision making.[62] It is not by accident that readiness is listed as the first of the nine subject areas. With the mission of "A Force in Readiness", readiness information is one of the most important single aspects that must be considered in all Marine Corps decision making.

At the division level a similar system is utilized, titled "The Division Program Progress Report System (DPPRS),"[63] Although additional information is also maintained and presented by means of this system, it is basically an outgrowth of the large volume of information generated within the division, most of which is concerned with readiness.

At the division level, the system also consists of formal briefings and the development and maintenance of a publication to provide a continuing and formal reference document for use by the Commanding General, his staff, and senior and subordinate commanders, in planning and decision making.

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[62] U. S. Marine Corps, Marine Corps Program Progress Report System (MCPPRS), Marine Corps Order 5200.9D, Washington, D.C.: Headquarters U. S. Marine Corps, 1971, pp. 1-2.

[63] 1st Marine Division, Division Program Progress Report System (DPPRS), 1st Marine Division Order 5213.2A, Camp Pendleton, Calif.: 1st Marine Division, 1972, pp. 1-5.

The primary impact, at the division level, however, is not the actual utilization of this program progress reporting system, but the fact that the review of detailed readiness information has become such an important consideration or procedural aspect in the decision making process.

b.   Division Combat Readiness Committee

The Division Combat Readiness Committee, which is also utilized to assist in decision-making, is a direct outgrowth of the utilization of readiness reporting systems within the Marine Corps.   The committee meets at the direction of, and is chaired by, the Assistant Chief of Staff, G-3.   In addition to the G-3, the Director of the Combat Readiness Central and selected subordinate commanders are involved.   The main purpose of this committee is to evaluate and resolve problem areas related to the readiness posture of subordinate units, and insure that the Assistant Chief of Staff, G-3, keeps himself updated on current readiness problem areas.   Minutes of the meeting are submitted to the Commanding General and the Assistant Chief of Staff, G-3, is prepared to brief the General, if required.

c.   Utilization of the Division Staff

One of the most significant impacts upon the Marine division, as a result of the readiness reporting systems, has been an expansion of the role of the division staff during decision-making.

Prior to the availability of detailed readiness information, resulting from the use of the new systems, decision making within the

division generally followed traditional staff procedures. Under this mode

of operation, decision making is accomplished by means of each general

and special staff section, analyzing and evaluating a particular problem

in terms of how specific courses of action would affect their particular area

of expertise. The advantages and disadvantages of each course of action

are also carefully weighed and enumerated. A fully staffed recommenda-

tion listing the courses of action in desending order of desirability, com-

plete with advantages and disadvantages for each, is then presented to the

commander. Under this system, when detailed and complete staff work

has been practiced, the problem with its recommended decision and pro-

posed concept for execution reaches the commander as a complete, staffed

paper. The only action required of the commander, following his review

of the package, is a simple approve or disapprove.

This procedure is particularly applicable in planning for

combat operations since it is essential that each proposed course of action

be carefully evaluated against all the various facets of responsibility that

fall under the staff cognizance of each general and special staff section.

This step by step formal decision making process is inherent in the sequence

of command and staff action outlined in Figure 7.[64]

Formal decision making is still an important part of division

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[64] U. S. Marine Corps, Fleet Marine Force Manual (FMFM) 3-1,
Command and Staff Action, Washington, D. C.: Headquarters U. S.
Marine Corps, 1966, p. 52.
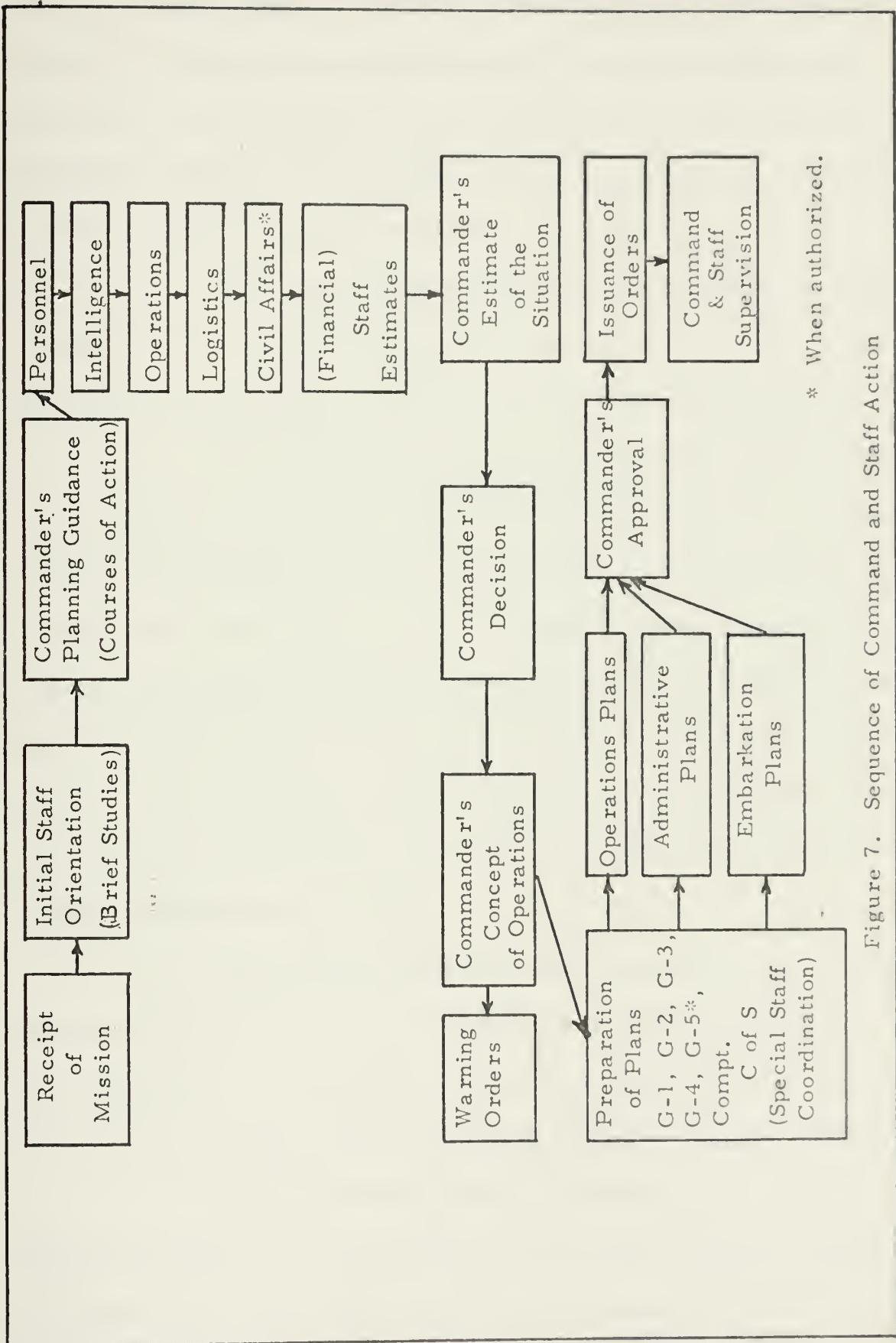
Figure 7. Sequence of Command and Staff Action

* When authorized.

staff work and will remain so for the forseeable future. However, the availability of detailed readiness information, along with other types of situational and status information, has stimulated the desire for more rapid and responsive decision making. This has resulted in a somewhat supplemental decision making process.

As a result of this desire, division staff officers must now be capable of not only functioning as a formal staff, but also be capable of providing large amounts of data in an organized and rapid manner.

The mechanics of presenting this information for immediate decision making varies from command to command. However, at the division level this generally takes the form of a command briefing such as the briefing associated with the Division Program Progress Report (discussed earlier) or any similar briefing required for a specifc command decision. Required readiness information is gleened from the FORSTAT and MARES reports. Since the division is in the reporting chain of command, information required for internal needs is simply extracted before it is forwarded to higher headquarters.

The decision making briefing takes place in a specially designated Division Briefing Room that has been designed to allow the maximum presentation of relevant unit, personnel and equipment information. The physical layout of a typical briefing room is illustrated in Figure 8.

The Commanding General is seated in the center of the room with his key general and special staff seated to either side and behind him. Along the front and side walls specially constructed chart holders and rear
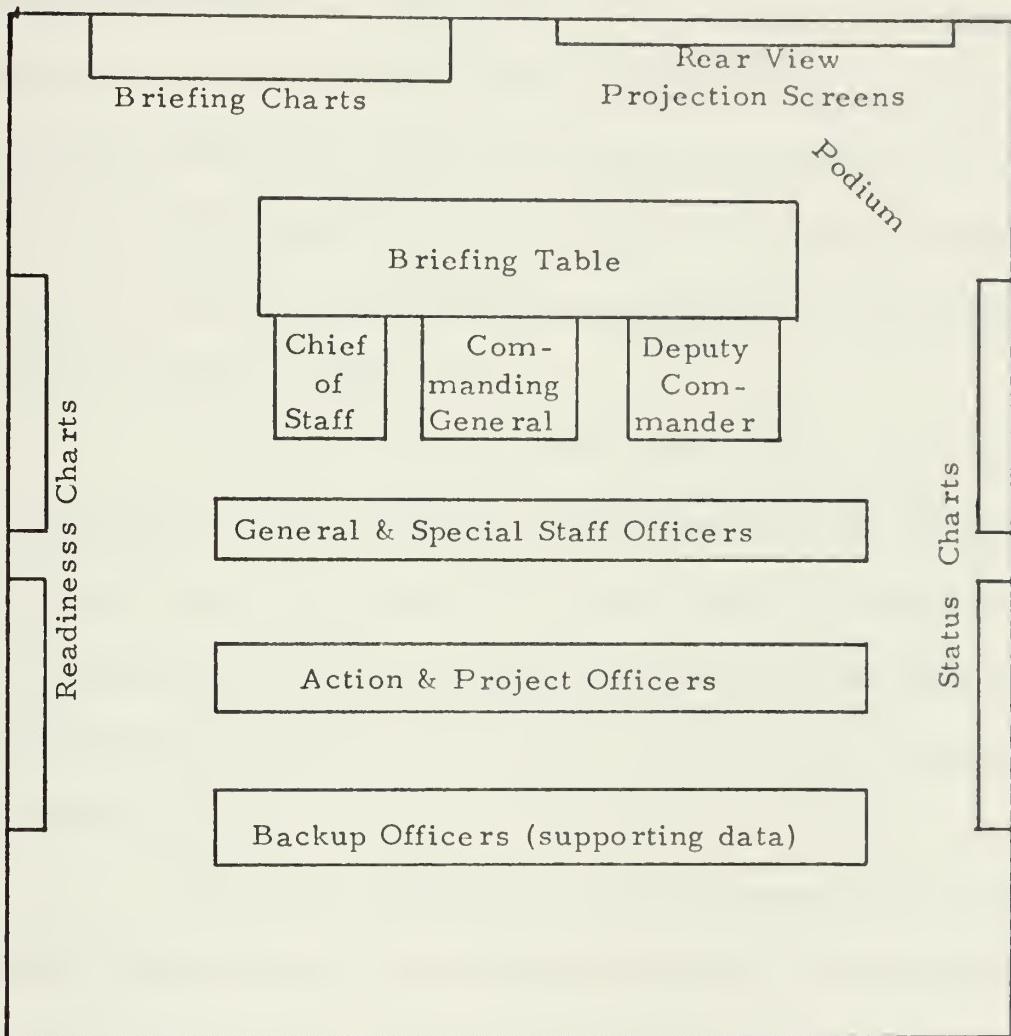
Figure 8.   Typical Division Briefing Room

view projection screens have been installed.

The actual briefing consists of the presentation of a given sequence of charts or slides, by a designated briefing officer representing each staff functional area. With information relevant to a particular decision presented in this manner, the Commanding General can quickly grasp the important aspects that affect a particular course of action. With his general and special staff officers, and their various action officers, immediately available, a particular issue can literally be coordinated, staffed and resolved "on the spot".

The responsibilities of the staff, in this case, has included the requirement to maintain updated readiness and status briefing charts and have sufficient backup data to justify any position or support any argument. The responsibility also includes the requirement to assemble, organize and present data in such a manner that it supports rapid division level decision making.

From the above, then, it can be seen that the availability of detailed readiness data has expanded the decision making apparatus within the Marine division, and has increased the responsibilities of the division staff.

D. EFFECT OF CENTRALIZED READINESS REPORTING
    SYSTEMS UPON MARINE DIVISION PERSONNEL

The impact of a new system upon the personnel within an organization is a complex yet very real aspect of todays rapidly changing organizational environment. The statements, opinions, and observations, presented in

this section represent the views of those officers and enlisted men interviewed in conjunction with this study.

The various aspects of human behavior within organizations has been an area of interest for many years. Early interest centered around the manipulation of physical factors (working conditions, etc.) in an effort to increase production. Over a period of years interest has gradually shifted away from the workers as a mass and has now focused upon the management process, which includes all participants from the worker to the manager, in the modern organization.

Additional factors have contributed to this gradual change of emphasis. These include (1) increased automation, (2) finer distinctions in occupational specialization, (3) refinement of the technical capabilities of an organization, and (4) the increased affluence of the population in general. The entire American society is rapidly changing as the nation enters the post industrial era.

Representing a segment of the overall American society, the Marine Corps, as well as the other military services, finds itself experiencing many of the same trends toward increased automation, specialization and complexity that have affected all organizations in today's complex work environment.

Within a changing environment the FORSTAT and MARES readiness reporting systems represent but one of the various methods devised to meet the ever increasing information needs of higher level Marine Corps commands. As might have been expected, interviews conducted in support of this study, revealed a number of significant impacts upon Marine division

personnel as a result of utilizing the FORSTAT and MARES centralized readiness reporting systems. The areas under which these impacts will be addressed in this section include, (1) the increased visibility of activities, (2) the role of commander vs manager, (3) career patterns and specialization, (4) the concept of an inverted organization triangle, and (5) a discussion concerning resistance to change.

1. Increased Visability of Activities

One of the most significant impacts upon the Marine division, as a result of the new centralized readiness reporting systems, has been the increased visibility of activities within the division. This was brought out in response to the specific question "What has been the most significant impact upon division personnel as a result of the new readiness reporting systems?" Almost without exception those personnel interviewed commented upon the visibility aspect.

There are obvious advantages and disadvantages associated with this increased visibility. As an advantage, higher level headquarters can review a large volume of readiness data associated with many individual reporting units, and thereby make more effective decisions concerning overall supply, purchasing, or maintenance policies. This in turn provides for a better state of readiness at the lower reporting levels. Another advantage results from the fact that all commanders and their staffs throughout the reporting chain are talking the same readiness language; and therefore are more aware of problems that exist at the lower levels. With this visibility, by means of a common language, it is easier for

higher headquarters to assist the lower reporting units in their efforts to resolve problem areas.

The increased visibility, concerning the activities of lower level reporting units, has also introduced certain disadvantages. Primary among these is the feeling, by lower units, that they are being closely scruitinized and second-guessed by higher headquarters.

It is this "fish-bowl" aspect that leads to certain problems. As an example, it was pointed out that higher headquarters invariably generate questions when they see a unit in a degraded readiness posture, (C-3 or C-4 in any of the FORSTAT measured areas, personnel, supplies, equipment, training, or overall readiness). Although the C-rating categories, in this example, are computed by percentage, they also involve an overall judgment consideration by the reporting unit commander. If, for example, a particular readiness report involved a tank battalion within the Marine division, it is conceivable that the battalion could be in a favorable readiness posture percentage wise, (C-1 or C-2), in the area of supplies and equipment, yet not have a particular item on hand which in itself seriously degrades the unit's readiness. This particular item could be 90MM gun barrels. Percentage wise the unit would be in a satisfactory supply and equipment status, yet it is missing a particular number of new gun barrels, so that the commander feels his ability to accomplish his mission has been degraded and therefore he feels that he should carry his unit at a lower readiness rating category.

The overall affect of this is that lower level commanders may

feel that an evaluation of their readiness posture based strictly upon percentages does not reflect a true evaluation of their capability to perform their mission. Yet they are reluctant to lower their readiness status since they know it will generate questions throughout the reporting chain.

The net result of this increased visibility aspect, is that lower level reporting units are under a certain degree of pressure and therefore have a tendency to report "politically". Reporting politically, it was stated, is: "a tendency to report what it is felt senior commanders want to be told". As a result, in some cases, reporting units tend to stretch the reporting criteria to its maximum and report themselves in an unrealistically favorable readiness posture.

2. Command Prerogatives and Responsibilities
vs the Role of Manager

Another aspect of the conversion to a centrally controlled, automated readiness reporting system is centered around the question of whether reporting unit commanders see the new system as degrading their prerogatives as commanders and increasing their roles as simply managers.

Surprisingly most of those interviewed felt that they had lost nothing as a commander. They did not feel they any of their power, authority or prerogatives had been decreased. They did feel, however, that the role of the individual commander had been expanded and that although he still commanded an organization in every sense of the word, he now also had the tools to closely manage the men, money and materials charged to

his responsibility. A commander has always been responsible for every-thing his unit does or does not do. However, most unit commanders now feel that, as a result of the new readiness reporting systems, higher headquarters possess   the required information to constructively assist them in certain areas. As an example of the effort to further assist lower level reporting commanders within the division, certain division staff officers have also been designated as commodity managers (e.g. engineer officer, communications officer, motor transport officer, and ordance officer) to determine trends, identify problem areas and in general provide expert assistance as required.

The net result is that unit commanders feel they can do a better job of commanding a unit based upon the fact that they now have better tools to manage their assests and more knowledgeable assistance from higher levels of command.

3.   Career Patterns and Specialization

As the Marine Corps moves further into the era of centrally controlled reporting systems, the impact upon individual career patterns increases. The Marine Corps has traditionally insisted that every Marine is first, last, and always a basic rifleman. This has been one of the common denominators that has given the Marine Corps a degree of cohesiveness even in its most diversified commands or organizations.

The idea of specialization has always been a problem, especially in the more technical fields, because it requires early orientation of a Marine in that particular direction and thereby reduces his opportunity for

a broader spectrum of assignments.

•   The question asked here was as follows: "Is it an advantage or disadvantage, career wise, for a Marine to become intimately involved with the readiness reporting system?" Granted that there are many other areas in which a Marine could become a specialist, but for purposes of this research the question was limited to just the FORSTAT and MARES reporting systems.

Responses to this question can generally be divided into two groups. Some of those officers and enlisted interviewed felt that, to be successful, a Marine should keep his career as broad and non-specialized as possible. Others felt that the key to success was to be a specialist in some particular area but still broaden oneself by means of other assignments as long as they did not distract from one's speciality.

The general consensus to this question was that it is advisable for all Marines to become intimately involved and familiar with the FORSTAT and MARES systems, since they have become such an important aspect in the management of men, money and materials within the Marine Corps. This is particularly true if a Marine can visualize his career as proceeding along the paths where this type knowledge is essential. For example, an officer who has served in a number of operations or logistic related assignments and perceives himself as earmarked for additional G-3 or G-4 work would find it to his advantage to become thoroughly familiar with the readiness reporting systems.

4. The Inverted Triangle Concept

Another question asked was "How do you feel about the fact that reporting units provide readiness information primarily for use by higher headquarters?" Responses to this question pointed out the fact that different types of information must be considered differently. For example, it was acknowledged that FORSTAT data is not as useful at the lower levels as it is at higher levels of control. On the other hand, MARES logistic data is considered an extremely valuable management tool for use by the reporting unit commanders.

In this regard the concept of an inverted triangle was mentioned. Many Marines see the traditional bureaucratic organizational triangle as having been inverted as it relates to readiness reporting. Rather than a broad base, reporting information up the chain to a small central control segment at the apex, they see a relatively small number of reporting units providing more and more information upward to a continually expanding central authority. The entire issue revolves around the fact that most Marines prefer to keep the ratio of support troops to combat troops as low as possible, and therefore do not favor the increasing requirement for specialists at the higher levels of command.

5. Resistance to Change

The well known concept of resistance to change was the subject of another question that was asked during the collection of information. The specific question was "Has there been any resistance to the conversion to FORSTAT and MARES reporting systems?"

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From the responses obtained, it is apparent that the new systems have generally been well accepted and any significant resistance occurred during the earlier stages of development and implementation.

The primary resistance to any new reporting system, especially at the lower levels, is the fact that it simply represents another reporting requirement. Until the worth of the system has been proven, it is usually judged in this light. The administrative burden of paper work and various reporting systems has always been a problem within the Marine Corps.

There has been a definite tendency over the past ten years to centrally obtain and utilize more and more information. This has consistently resulted in the requirement for more and more detailed information from the subordinate commanders.

The lack of significant resistance to the FORSTAT and MARES systems can generally be attributed to the fact that these two particular readiness reporting systems, even though they are centrally controlled, have clearly provided a usable management tool, to meet the needs of not only the Marine divisions, but the overall Marine Corps as well as the Joint Chiefs of Staff.

V. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This study has reviewed currently existing centralized readiness information reporting systems, now in use by the U. S. Marine Corps, and examined their functional impact upon the U. S. Marine division. Having completed that analysis, this chapter will summarize significant aspects of the study, discuss certain general conclusions, and present some specific recommendations.

A. SUMMARY

In approaching this study, a number of specific objectives were outlined. These included:

1. A review of the general trend toward centralization of control, within the Department of Defense, and the ever increasing requirement for readiness information at the highest levels of control.

2. An examination of the collection, dissemination, management and usage of operational readiness information within the Marine Corps, with special emphasis upon activities within a typical Marine division.

3. An examination of the impact of centralized readiness reporting systems upon a typical Marine division.

To accomplish the specific objectives and overall purpose of this study, a model was developed to represent the relationships between the various factors under review. In addition to providing a visual, explanatory method of organizing the study, the model was also designed to reflect

certain "cause and effect" relationships. The "causal" factors, contributing to the eventual use of centralized readiness reporting systems, included (1) the trend, following World War II, toward unification of the armed services, plus the gradual centralization of control and decision making at the Department of Defense level, (2) the specific policies and programs established by Mr. McNamara which led to a high degree of centralization within the Department of Defense, (3) increased readiness information requirements during the Vietnam war, and (4) the gradual development, refinement and availability of the computer. The "effect" factors, resulting from the utilization of these reporting systems, included (1) organizational changes, (2) impact upon decision making, and (3) the effect upon Marine division personnel.

The overall approach of the study, then, was to (1) start with the National Security Act of 1947 and provide a chronological analysis of how centralization has gradually evolved within the Department of Defense, (2) identify and describe two operational readiness reporting systems that are a direct outgrowth of the historical trend toward centralization, and (3) identify and analyze the observable impacts of these resulting centralized readiness reporting systems upon the U. S. Marine division.

Although centralization was not a consciously established objective during the years just after World War II, it did gradually evolve as a result of the efforts toward unification within the Department of Defense. During the period 1947 to 1960 the driving force behind the move toward unification was a ligitimate desire to make the Armed Forces of the United

States more responsive to national objectives. The enactment of the National Security Act of 1947 partially accomplished this by attempting to bring the Armed Services under one roof and provide for a more co-ordinated relationship between military and civilian elements of the government. Once initiated, the trend toward unification continued. Ammendments to the 1947 Act and continuing reorganization efforts, occurring in 1949, 1953 and 1958, contributed to this gradual process. One of the more significant events during this latter period was the Reorganization Act of 1958, which introduced the concept of unified and specified commands and established a clear chain of command from the President, through the Secretary of Defense, to the unified and specified commands.

The efforts toward unification of the Armed Services had, by 1960, vastly increased the authority of the Secretary of Defense and shortened the chain of command to the operational forces. The stage had been suf-ficiently set to allow a strong Secretary of Defense to bring the Armed Services to a level of centralized control never before experienced. Among the much debated contributions of Mr. McNamara, his continuing require-ments for information upon which to base decisions led to certain far-reaching, long-lasting impacts upon the Armed Services. One of these impacts, as addressed by this study, was the requirement for readiness information to be provided by the individual services. The development of centralized readiness reporting systems and the subsequent impacts upon the operational units, as presented in this study, were the eventual outgrowth

of guidance provided in 1962 by the Department of Defense for the development and operation of a Force Status and Identity Reporting System.

Based upon the guidance provided, the Joint Chiefs of Staff and the separate services began the development of centralized readiness reporting systems when the Vietnam war added impetus to the effort. The most significant contribution of the Vietnam war, to the evolving process, was the increased need for accurate, real-time unit readiness information at the highest levels within the Department of Defense. Although originally accomplished by standard message type reporting, it became increasingly obvious that a more standardized type of reporting was needed to reflect detailed readiness criteria. As an interim measure, the Operational Status Reporting System (OPSTAT) was developed and used by the Marine Corps. Although the report was based upon detailed readiness criteria, it utilized a complicated format and was still submitted by message.

At the height of the Vietnam war effort, when the requirement for readiness information was increasing, the availability and utilization of computers within the Department of Defense had reached the point to allow automation of the readiness reporting systems.

A wide variety of automated systems have gradually evolved, throughout the Department of Defense, in recent years. Two of these systems, which have had a direct impact upon Marine Corps operational units, were reviewed by this study as they can be related to the concept of centralization of control.

These two centralized readiness reporting systems, the Joint Chiefs

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of Staff Force Status and Identify Report (FORSTAT) and Marine Automated Readiness Evaluation System (MARES), have had a considerable impact upon the Marine operational units and are generally viewed as the two most significant operational readiness type reports currently in use.

A number of significant differences exist between the two reports. FORSTAT is a Joint Chiefs of Staff directed report and involves the reporting of readiness and status of forces information from the reporting unit level up through the operational chain of command to the Joint Chiefs. This method of reporting provides readiness information for use by all levels of command up through the operational chain of command. The MARES reporting system, on the other hand, is utilized just within the Marine Corps to report detailed status of readiness information in the areas of equipment/supplies on hand and equipment readiness. In addition to supporting the overall readiness ratings reported in the FORSTAT system, the intent of the MARES system is to provide a considerable amount of detailed logistic data for use by operational units throughout the Marine Corps. Thus these two independent, but intimately related, parallel readiness reporting systems currently provide the readiness information required to centrally control and direct the activities of the U. S. Marine Corps.

The utilization of these two centralized, automated, readiness reporting systems within the Marine Corps has produced certain observable impacts at the operational unit levels. The reporting level selected for analysis by this study was the Marine division since that is the level where

the reports are consolidated and automated for further submission and also the reporting level at which many significant impacts have occurred.

In analyzing the various impacts upon the Marine division, a review of classical and contemporary organization theory was first conducted and the Marine Corps examined as a bureaucratic organization. The Marine division was then addressed, as a part of a larger Marine Corps bureaucracy, and the various impacts of centralized readiness reporting systems were discussed.

During the research phase of this study one of the first impacts identified was the structural changes within the division that had resulted from the adoption of the two readiness reporting systems. This included the establishment of a Division Combat Readiness Central/Management Analysis Section at the division headquarters level, consisting of four officers and eight enlisted necessary to manage FORSTAT reporting. In addition, one officer and two enlisted were assigned, on a full time basis, to a "MARES reporting section". In support of these structural changes other division staff members are required to be sufficiently knowledgable regarding these reports to insure accurate coordination prior to report submissions. In addition to the above division staff changes, each of the 32 division reporting units have designated, generally on an additional duty basis, one officer and two enlisted to manage FORSTAT reporting and one officer and two enlisted to handle MARES reporting.

In examining the reporting procedures it was found that approximately 2,350 man-hours per month were required for submission of the FORSTAT

report and approximately 8,288 man-hours per month for the MARES

report. Compared to an estimated 208 man-hours per month required

under the old OPSTAT system, it was obvious that a considerable increase

in man-hour requirements had resulted from adoption of the new reporting

systems.

Another area in which a significant impact was observed was in the

area of decision making at the division staff level. The most important

contribution of the readiness reporting systems, in this area, was the

availability and consistent usage of detailed readiness data in the Division

Program Progress Report System and usage by the division staff during

in-depth decision-making briefings for the Commanding General.

Certain impacts were also identified regarding Marine division

personnel. Among the most significant of these was the general feeling

that the usage of these reporting systems had increased the visibility of

lower unit activities. Another aspect examined indicated that lower level

reporting unit commanders did not feel that their prerogatives had been

reduced as unit commanders. It was also determined that the resistance

to the new systems had been negligible although some Marines saw central-

ized reporting as contributing to the growth of a continually expanding

central authority and the inversion of the traditional bureaucratic organ-

izational triangle.

A majority of those interviewed voiced some degree of concern over

the trend toward utilization of centralized systems within the Marine Corps.

However, most felt that the FORSTAT and MARES reporting systems have

generally provided an excellent management tool for use not only by the lower level operational units but throughout the Marine Corps.

In summary then, this study has addressed the relationship between (1) the gradual evolution of centralization within the Department of Defense, (2) the subsequent development and utilization of two centralized readiness reporting systems within the Marine Corps, and (3) the resulting impact of these reporting systems upon the U. S. Marine division.

B.   CONCLUSIONS

The period since World War II has witnessed many, far-reaching changes in the organization and overall management of the U. S. Armed Forces.   During this period successive legislative and administrative actions have occurred which reflect a continuing effort to integrate the defense establishment and consolidate power and control at the Secretary of Defense, Joint Chiefs of Staff, and individual service levels.

In light of the requirements to meet national political and military objectives it appears that high level authorities within the Department of Defense organization must have access to accurate, timely readiness posture information.   It also seems likely that the requirements for readiness information, within the Department of Defense, will not decline but on the contrary will increase as the United States continues to meet its free world commitments.   Based upon this reasoning, it is concluded that, (1) centralized readiness reporting systems will continue to be used in the Marine Corps and (2) these systems will gradually become more comprehensive and detailed.

At the Marine division level, centralization is viewed as a threat when allowed to reach dangerous extremes whereby the operational independence of lower level units is threatened. However, the majority of those Marines interviewed generally viewed the degree of centralization associated with the FORSTAT and MARES reporting systems as a necessary condition in obtaining the benefits of these two excellent management tools. Most of those interviewed also felt that the Marine Corps has been commited to a course of action in which centralized controlling systems will continue to be developed and utilized.

Most division level Marines recognize that the Marine Corps, as well as the environment in which it functions, is continually changing. In this changing environment, (1) information technology has literally exploded, (2) weapons lethality and delivery capabilities have improved, (3) weapons systems have become more complex, and (4) higher levels of technical ability and proficiency are required of organizational personnel. In this regard Marines generally view FORSTAT and MARES centralized readiness reporting systems as simply representative of one area in which the Marine Corps has adopted itself to meet the requirements of a more complex environment.

Specific conclusions resulting from this study include the following:

1.   The international environment will dictate the continued use of centralized control systems within the Department of Defense.

2.   The Marine Corps will continue to develop and utilize centralized systems.

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3. FORSTAT and MARES centralized readiness reporting systems will continue to be used by the Marine Corps.

4. Existing readiness reporting systems will gradually become more comprehensive and complex as the state of the art improves.

5. Most division level Marines are aware of the advantages and disadvantages associated with centralization in a bureaucratic organization.

6. The level of centralization associated with FORSTAT and MARES reporting systems is considered as acceptable in light of the benefits obtained.

7. The use of centralized readiness reporting systems has dictated certain organizational structure changes within the Marine division and generated significant additional man-hour requirements.

8. Existing readiness reporting systems have had an impact upon decision making due to the availability of additional detailed information.

9. Marine reporting unit commanders do not view the FORSTAT and MARES reporting systems as endangering their prerogatives as commanders, but see the systems as assisting them in the management of men, money, and materials.

10. No significant resistance has been encountered concerning the use of these two readiness reporting systems within the Marine Corps.

11. The FORSTAT and MARES centralized readiness reporting systems are considered, by the majority of those Marines interviewed, to be excellent management tools.

C. RECOMMENDATIONS

As a result of the analysis conducted during this study the following recommendations are provided:

1. Prior to any future revision, expansion or updating of the FORSTAT and MARES readiness reporting systems, it is recommended that any proposed changes be critically examined and an evaluation be made of the possible impact upon the lower level reporting units and the overall Marine Corps to determine if:

a. Proposed changes will result in further centralization of control, with a view toward avoiding any dilution of commanders' autonomy and authority unless the benefits clearly override this consideration.

b. Any revisions to the two systems will result in unnecessary reporting duplication or an increase in man-hour requirements at the reporting unit level, with a view toward assuring that the benefits resulting from changes would exceed any additional resources required to effect the changes.

c. Changes would generate the requirement for additional high level staff billets and thereby contribute to an undesirable increase in the ratio of support troops to combat troops.

d. Proposed changes will alter the value of the two reporting systems as management tools.

2. To obtain the maximum benefits from continued utilization of the

FORSTAT and MARES reporting systems, it is recommended that additional efforts be made to increase the knowledge level of Marine personnel, regarding these systems, by:

    a. Stressing the relative importance and content of these reporting systems at appropriate Marine officer's professional schools (e.g. Basic School, Amphibious Warfare School, Command and Staff College, etc.).

    b. Insuring that curriculums of appropriate Marine officer and enlisted skill courses adequately address these two readiness reporting systems. (e.g. Data Systems Officer course, Systems Analysis and Design Enlisted course, Marine Corps Staff NCO Academy, etc.).

    c. A continuous local education effort at the Marine division level utilizing lectures, short courses, programmed texts and inclusion of material in division level schools.

    3. It is recommended that the Marine Corps tables of organization be updated to include appropriate Marine division headquarters staff billets within the G-3 and G-4 sections necessary to support the officially established FORSTAT and MARES readiness reporting systems.

Recommendations resulting from this study are provided for possible improvements in the continuing development and utilization of centralized reporting and control systems within the U. S. Marine Corps.

APPENDIX A

GLOSSARY OF TERMS

1. Administrative Chain of Command -- The normal chain of command as determined by the administrative organization.(JCS Pub. 1, p. 3).

2. Amphibious Demonstration -- A lesser included type of amphibious operation conducted for the purpose of deceiving the enemy by a show of force with the expectation of deluding the enemy into a course of action unfavorable to him. (JCS Pub. 1, p. 22)

3. Amphibious Operation - An attack launched from the sea by naval and landing forces, embarked in ships or craft involving a landing on a hostile shore. (JCS Pub. 1., p. 23).

4. Amphibious Raid -- A limited type of amphibious operation; a landing from the sea on a hostile shore involving swift incursion into, or a temporary occupancy of an objective, followed by a planned withdrawal. (JCS Pub. 1., p. 23).

5. Billet -- A personnel position or assignment which may be filled by one person. (JCS Pub. 1, p. 45).

6. Chain of Command -- The succession of commanding officers from a superior to a subordinate through which command is exercised. (JCS Pub. 1., 1 Mar 73, p. 56).

7. Command and Control -- The exercise of authority and direction by a properly designated commander over assigned forces in the accomplishment of his mission. Command and control functions are performed through an arrangement of personnel, equipment, communications, facilities, and procedures which are employed by a commander in planning, directing, coordinating, and controlling forces and operations in the accomplishment of his mission. (JCS Pub. 1., p. 66).

8. Commody Manager -- An individual within the organization of an inventory control point or other such organization assigned management responsibility for a homogeneous grouping of material items. (JCS Pub. 1, p. 68)

9. Continental United States (CONUS) -- United States territory, including the adjacent territorial waters located within the North American continent between Canada and Mexico. (JCS Pub. 1, p. 75)

10. Control -- Authority which may be less than full command exercised by a commander over part of the activities of subordinate or other organizations. (JCS Pub. 1, p. 76).

11. D-Day -- The unnamed day on which a particular operation commences or is to commence. (JCS Pub. 1, p. 88).

12. Data -- A representation of facts, concepts or instructions in a formalized manner suitable for communication, interpretation, or processing by humans or by automatic means. Any representations such as characters or analog quantities to which meaning is or might be assigned. (JCS Pub. 1, p. 87).

13. Defense Readiness Condition (DEFCON) -- A uniform system of progressive alert postures for use between the Joint Chiefs of Staff and the commanders of unified and specified commands and for use by the Services. (JCS Pub. 1, p. 92).

14. Division -- A major administrative and tactical unit/formation which combines in itself the necessary arms and services required for sustained combat, larger than a regiment/brigade and smaller than a corps. (JCS Pub. 1, p. 101).

15. Fleet Marine Force -- A balanced force of combined arms comprising land, air and service elements of the United States Marine Corps. A Fleet Marine Force is an integral part of a United States Fleet and has the status of a type command. (JCS Pub. 1, p. 126).

16. Flexible Response -- The capability of military forces for effective reaction to any enemy threat or attack with actions appropriate and adaptable to the circumstances existing. (JCS Pub. 1, p. 126).

17. General Staff -- A group of officers in the headquarters of Army or Marine divisions, Marine brigades and aircraft wings, or smaller or larger units which assist their commanders in planning, coordinating, and supervising operations. (JCS Pub. 1, p. 134).

18. General War -- Armed conflict between major powers in which the total resources of the belligerants are employed, and the national survival of a major belligerant is in jeopardy. (JCS Pub. 1, p. 135).

19. M-Day -- The term used to designate the day on which mobilization is to begin. (JCS Pub. 1, p. 186).

20. National Command Authorities -- The President and the Secretary of Defense or their duly deputized alternates or successors. Commonly referred to as NCA. (JCS Pub. 1, p. 201).

21. Operational Chain of Command -- The chain of command established for a particular operation or series of continuing operations. (JCS Pub. 1, p. 216).

22. Operational Readiness -- The capability of a unit, ship, weapon system or equipment to perform the missions or functions for which it is organized or designed. May be used in a general sense or to express a level or degree of readiness. (JCS Pub. 1, p. 217).

23. Specified Command -- A command which has a broad continuing mission and which is established and so designated by the President through the Secretary of Defense with the advice and assistance of the Joint Chiefs of Staff. It normally is composed of forces from but one service. (JCS Pub. 1, p. 278).

24. Standing Operating Procedure (SOP) -- A set of instructions covering those features of operation which lend themselves to a definite or standardized procedure without loss of effectiveness. (JCS Pub. 1, p. 282).

25. Table of Organization and Equipment -- The table setting out the authorized number of men and major equipment in a unit. (JCS Pub. 1, p. 113).

26. Unified Command -- A command with a broad continuing mission under a single commander and composed of significant assigned components of two or more services, and which is established and so designated by the President, through the Secretary of Defense with the advice and assistance of the Joint Chiefs of Staff, or, when so authorized by the Joint Chiefs of Staff, by a commander of an existing unified command established by the President. (JCS Pub. 1, p. 312).

27. Unit -- Any military element whose structure is prescribed by competent authority, such as a table of organization and equipment; specifically, part of an organization. (JCS Pub. 1, p. 312).

28. Unit Identification Code -- The six-character alpha-numeric code which uniquely identifies each organization being reported for the full period of existence of that organization. (JCS Pub. 6).

29. Wing -- A balanced Marine Corps task organization of aircraft groups/squadrons together with appropriate command, air control, administrative, service and maintenance units. A standard Marine Corps aircraft wing contains the aviation elements normally required for the air support of a Marine division. (JCS Pub. 6).

30. Worldwide Military Command and Control System (WWMCCS) --
The WWMCCS consists of the facilities, equipment, communications, procedures, and personnel that provide the technical and operational support involved in the function of command and control of U. S. Military forces. (JCS Pub. 6, p. D-10).

All entries in this glossary are taken from the following references:

1. Joint Chiefs of Staff, Force Status and Identity Report (FORSTAT), Joint Chiefs of Staff Publication 6, Vol. II, Part 2, Chapter 1, Washington, D. C. : The Joint Chiefs of Staff, 1974

2. Joint Chiefs of Staff, Department of Defense Dictionary of Military and Associated Terms, Joint Chiefs of Staff Publication 1, Washington, D.C.: The Joint Chiefs of Staff, 1972.

APPENDIX B

FORSTAT CARD TYPE FORMATS

This appendix provides a sample format for those FORSTAT card types normally utilized at the U. S. Marine division reporting unit level. Brief definitions of significant data elements are provided where data element designations are not self-explanatory. Complete definitions and detailed reporting instructions are available in Joint Chiefs of Staff Force Status and Identity Report (FORSTAT), JCS Publication 6, Volume II, Part 2, Chapter I, dated 15 August 1974.

CARD NUMBER		JRS CONTROL
SECURITY CLASSIFICATION		
TRANSACTION CODE		
CARD TYPE		
UNIT IDENTIFICATION CODE (UIC)		RECORD CONTROL
CINC/SERVICE COMMAND CODE		
ORG EXERCISING OPERATIONAL COMMAND/CONTROL		
ORG EXERCISING ADMINISTRATIVE CONTROL		
HOME LOCATION CODE		
PRESENT LOCATION CODE		
SHIP IN WHICH ORGANIZATION EMBARKED		
CURRENT STATUS AND ACTIVITY CODE		
ORGANIC ORG ESTABLISHED		
PARENT'S UIC		
COMBINED COMMAND CODE		
DEFCON STATUS		
GEOGRAPHIC COORDINATES		
NUCLEAR CAPABILITY INDICATOR		
CMDR'S EVAL OF PCT EFF		
ORIGINATOR'S UIC		JRS CONTROL
REPORT INDICATOR		
REPORT NUMBER		

-- The unified/specified command or
service to which the organization is
assigned.

-- The geographical location of the unit's
permanent base.

-- The unit's present geographic location.

-- Current activity of the organization.

-- Detached organization created from the
reporting unit's organic resources.

-- Parent of created detachment. For use
by detachments when reporting.

-- Combined command (e.g. NATO, etc.)
under which the organization is operating.

CARD NUMBER	JRS CONTROL
SECURITY CLASSIFICATION	
TRANSACTION CODE	
CARD TYPE	
UNIT IDENTIFICATION CODE (UIC)	RECORD CONTROL
BILLET	*
RANK OF INCUMBENT	
NAME OF INCUMBENT	
Leave blank	
MAJOR MARINE COMMAND	
ORIGINATOR'S UIC	JRS CONTROL
FS REPORT INDICATOR	
REPORT NUMBER	

-- The abbreviation of billet being reported (i.e., CG, CO, G-3, etc.).

-- The command receiving reconciliation listings from Headquarters Marine Corps.

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CARD TYPE J -- ORGANIZATION PERSONNEL STRENGTH DATA

CARD NUMBER	JRS CONTROL
SECURITY CLASSIFICATION	
TRANSACTION CODE	
CARD TYPE	
UNIT IDENTIFICATION CODE (UIC)	RECORD CONTROL
TYPE OF PERSONNEL	SECONDARY CONTROL
LOCATION OR UNIT IDENTIFICATION CODE (UIC)	
STRUCTURED STRENGTH	
AUTHORIZED STRENGTH	
ASSIGNED-STRENGTH	
POSSESSED STRENGTH	
DATE OF CHANGE OF PERSONNEL INFORMATION	
DEPLOYABLE STRENGTH	
TASKED DEPLOYABLE STRENGTH	
CASUALTIES/ENEMY PRISONERS OF WAR	
CUMULATIVE CASUALTIES/ENEMY PRISONERS OF WAR	
CUM CAS ENEMY PW EDIT BYPASS	
ORIGINATOR'S UIC	JRS CONTROL
REPORT INDICATOR	
REPORT NUMBER	

-- Includes commissioned officers, warrent officers, enlisted, etc.

-- Reflects the structured strength of the organization.

-- Indicates personnel permanently authorized to the organization.

-- Indicates personnel permanently assigned and chargable to the organization.

-- Indicates personnel physically present.

-- Indicates total personnel selected to deploy.

--Indicates the number of personnel required to deploy.

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CARD NUMBER	JRS CONTROL
SECURITY CLASSIFICATION	
TRANSACTION CODE	
CARD TYPE	
UNIT IDENTIFICATION CODE (UIC)	RECORD CONTROL
CATEGORY	*
USMC GROUND OFFICERS	
USMC AVN GROUND OFFICERS	
USMC NAVAL AVIATORS	
USMC NAVAL FLIGHT OFFICERS	
USMC ENLISTED	
US NAVY OFFICERS	
US NAVY ENLISTED	
OTHER OFFICERS	
OTHER ENLISTED	
"AS OF" DATE OF PERSONNEL INFORMATION	
ORIGINATOR'S UIC	JRS CONTROL
FS REPORT INDICATOR	
REPORT NUMBER	

-- The category of personnel data being reported (i. e. chargeable to the organization, etc.).

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Field	Control
CARD NUMBER	JRS CONTROL
SECURITY CLASSIFICATION	
TRANSACTION CODE	
X CARD TYPE	
UNIT IDENTIFICATION CODE (UIC)	RECORD CONTROL
TYPE OF READINESS	•
CURRENT OVERALL RDY RATING	
OVERALL REASON	
RESOURCE RATING-PERSONNEL	
PRIMARY REASON RESOURCE RATING FOR PERSONNEL NOT FULLY READY	
RESOURCE RATING- EQPT/ SUPPLY	
PRIMARY REASON RESOURCE RATING FOR EQPT/SUPPLIES NOT FULLY READY	
RESOURCE RATING-EQPT RDY	
PRIMARY REASON RESOURCE RATING FOR EQUIPTMENT READINESS NOT FULLY READY	
RESOURCE RATING-TRAINING	
PRIMARY REASON RESOURCE RATING FOR TRAINING NOT FULLY READY	
SECONDARY REASON ORGANIZATION NOT FULLY READY	
TERTIARY REASON ORGANIZATION NOT FULLY READY	
FCST OVERALL READINESS RAT	
FORECASTED DATE OF CHANGE	
READINESS RATING LIMIT	
REASON RDY RATING LIMIT	
DATE OF CHANGE OF READINESS INFORMATION	
BLANK	
ORIGINATOR'S UIC	JRS CONTROL
FS REPORT INDICATOR	
REPORT NUMBER	

-- Includes general readiness, readiness for contingency operations, etc.

-- The degree to which an organization is capable of performing its mission.

-- The forcasted improvement or reduction in a unit's cability.

-- Service-imposed limitations preventing an organization from attaining a fully ready status.

CARD NUMBER	JRS CONTROL
SECURITY CLASSIFICATION	
TRANSACTION CODE	
CARD TYPE	
UNIT IDENTIFICATION CODE (UIC)	RECORD CONTROL
MAJOR EQUIPMENT IDENTIFICATION	SECONDARY CONTROL
FOREIGN DELIVERY EQPT CAP	
MAJOR EQUIPMENT—AUTHORIZED	
MAJOR EQUIPMENT—ALLOCATED	
MAJOR EQUIPMENT—POSSESSED	
MAJOR EQUIPMENT OPERATIONALLY READY DUAL	
MAJOR EQUIPMENT OPERATIONALLY READY NUCLEAR	
MAJOR EQUIPMENT OPERATIONALLY READY CONVENTIONAL	
MAJOR EQUIPMENT OPERATIONALLY READY OTHER	
PRIMARY DUTY CREWS AUTHORIZED	
PRIMARY DUTY CREWS ALLOCATED	
PRIMARY DUTY CREWS FORMED	
PRIMARY DUTY CREWS MISSION-READY DUAL	
PRIMARY DUTY CREWS MISSION-READY NUCLEAR	
PRIMARY DUTY CREWS MISSION-READY CONVENTIONAL	
PRIMARY DUTY CREWS MISSION-READY OTHER	
MAJOR EQUIPMENT RECONNAISSANCE CAPABILITY	
ORIGINATOR'S UIC	JRS CONTROL
REPORT INDICATOR	
REPORT NUMBER	

-- The major equipment/weapon about which status data is being reported.

-- Equipment under control of non-U.S. force (e.g. NATO, Canadian, etc.) but reported by U. S. forces.

-- Includes equipment that is operationally ready for both nuclear and conventional use.

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CARD NUMBER	JRS CONTROL
SECURITY CLASSIFICATION	
TRANSACTION CODE	
M CARD TYPE	
UNIT IDENTIFICATION CODE (UIC)	RECORD CONTROL
MAJOR EQUIPMENT IDENTIFICATION	SECONDARY CONTROL
TEMPORARY LOCATION CODE	
MAJOR EQUIPMENT POSSESSED	
MAJOR EQUIPMENT OPERATIONALLY READY DUAL	
MAJOR EQUIPMENT OPERATIONALLY READY NUCLEAR	
MAJOR EQUIPMENT OPERATIONALLY READY CONVENTIONAL	
MAJOR EQUIPMENT OPERATIONALLY READY OTHER	
PRIMARY DUTY CREWS FORMED	
PRIMARY DUTY CREWS MISSION-READY DUAL	
PRIMARY DUTY CREWS MISSION-READY NUCLEAR	
PRIMARY DUTY CREWS MISSION-READY CONVENTIONAL	
PRIMARY DUTY CREWS MISSION-READY OTHER	
MAJOR EQUIPMENT RECONNAISSANCE CAPABILITY	
BLANK	
ORIGINATOR'S UIC	JRS CONTROL
FS REPORT INDICATOR	
REPORT NUMBER	

-- The geographic location at which the organizations' equipment is temporarily located.

-- The equipment under operational control of the organization commander at the temporary location.

CARD NUMBER		JRS CONTROL
SECURITY CLASSIFICATION		
TRANSACTION CODE		
R CARD TYPE		
UNIT IDENTIFICATION CODE (UIC)		RECORD CONTROL
RMKS CARD SEQUENCE NBR		
TOTAL RMKS CARDS IN RMK		
DATA ELEMENT LABEL		SECONDARY CONTROL
(3) CARD COLUMNS IN SECOND AND SUCCEEDING CARDS OF CARDS IN A REMARK	REMARKS IDENTIFICATION (IN FIRST CARD OF CARDS IN A REMARK)	
	REMARK (2) CARD COLUMNS IN FIRST CARD OF CARDS IN A REMARK	
ORIGINATOR'S UIC		JRS CONTROL
FS REPORT INDICATOR		
REPORT NUMBER		

-- The identification of the data upon which a remark is to be made.

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APPENDIX C

FORSTAT READINESS REPORTING CRITERIA
(Marine Division Only)

1.   Reporting under the three measured resource areas.

    a.   Personnel Readiness

    (1)   Personnel readiness percentage computations are based upon the relationship of assigned strength to structured (authorized) strength.

    (2)   Computed percentages are compared with the following criteria to determine the reportable personnel readiness rating.

        C-1   Not less than 90 percent of structured strength is assigned, including sufficient personnel of essential ranks/MOS's to enable the organization to operate and maintain all mission-essential weapons and equipment on a sustained basis.

        C-2   Less than 90 percent but not less than 80 percent of structured strength is assigned, including sufficient personnel of essential ranks/MOS's.

        C-3   Less than 80 percent but not less than 70 percent of structurel strength is assigned, including sufficient personnel of essential ranks/MOS's.

        C-4   Less than the criteria specified for a C-3 rating.

b. Equipment and Supplies On Hand (Material Readiness)

(1) Material readiness of reporting units/organizations is determined by computing the straight percentage of combat-essential equipment possessed as compared to the total amount authorized.

(2) Percentages obtained in accordance with the above are compared with the following criteria to determine readiness of equipment/supplies on hand.

C-1 Not less than 90 percent of authorized combat-essential equipment is possessed.

C-2 Less than 90 percent but not less than 80 percent of authorized combat-essential equipment is possessed.

C-3 Less than 80 percent but not less than 70 percent of authorized combat-essential equipment is possessed.

C-4 Less than criteria for C-3.

c. Equipment Readiness

(1) Units/organizations reporting under this category will base reports upon the percentage of combat-essential equipment possessed and operable as compared to authorized.

(2) Percentages obtained will be compared with the following criteria to determine equipment readiness.

C-1 Not less than 85 percent of authorized combat-essential equipment is possessed and operable.

C-2 Less than 85 percent but not less than 70 percent of authorized combat-essential equipment is possessed and operable.

C-3   Less than 70 percent but not less than 55 percent
of authorized combat-essential equipment is possessed and operable.

C-4   Less than the criteria established for C-3.

d.   Training Readiness

(1)   Training readiness will be determined by using the
following criteria:

C-1   The organization can deploy for a combat mission
without requiring further training.   Not less than 85 percent of authorized
crews are combat ready.

C-2   It is desirable that the organization have 2 weeks
of additional training prior to deployment.   Less than 85 percent, but not
less than 70 percent, of authorized crews are combat ready.

C-3   It is desirable that the organization have one month
of additional training prior to deployment.   Less than 70 percent of auth-
orized crews are combat ready.

C-4   Less than the criteria established for C-3.

e.   Composite Readiness

In addition to reporting readiness under the four measured
resource areas, each organization/unit/command submits a composite
readiness rating which reflects the overall combat readiness of that organ-
ization/unit/command.

This overall readiness rating is normally the lowest of the
ratings in the four measured resource areas.   However, as an exception,
if, in the judgment of the commander, strict application of the particular

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C-rating criteria does not provide a valid picture of the organization's capability to carry out its assigned mission, a higher or lower overall readiness rating may be assigned and the commander's justification or rational explaination may be provided by means of submission of a Type R (Remarks) card.

APPENDIX D

MARES CARD TYPE FORMATS

This appendix provides a sample format for each of those MARES card types normally utilized at the Marine division reporting unit level.[*] Brief definitions of significant data elements are provided where data element descriptions are not self-explanatory. Complete definitions and detailed reporting instructions are available in (1) Joint Chiefs of Staff Force Status and Identity Report (FORSTAT), JCS Publication 6, Volume II, Part 2, Chapter 1, dated 15 August 1974, (2) Marine Corps Automated Readiness Evaluation System Logistics User Procedures, Marine Corps Order 4400.136, dated 7 August 1974, and (3) Standing Operating Procedures for Marine Automated Readiness Evaluation System (MARES) Logistics, 1st Marine Division Order P3000.5, dated 29 April 1974.

* Note: Regardless of the method by which logistic information is collected within the division, including the use of locally generated forms, the division computer output program produces the outgoing reports in the formats presented in this appendix.

CARD TYPE LMI -- SUPPLY STATUS REPORT

CARD NUMBER	JRS CONTROL
SECURITY CLASSIFICATION	
TRANSACTION CODE	
CARD TYPE	
UNIT IDENTIFICATION CODE (UIC)	RECORD CONTROL
UNIT REQUISITION NUMBER (IN COMBINATION WITH CC 9-14)	SECONDARY CONTROL
LAST KNOWN HOLDER	
FSN	
QUANTITY REQUISITIONED	
QUANTITY ON HAND	
SPECIAL CATEGORY	
TAM CONTROL NUMBER	
ID NUMBER	
SERIAL NUMBER (D/L ITEM)	
TRANSMITTING COMMAND IDENTIFYING DATA (ENTERED BY FMFPAC, FMFLANT, 4TH MAW AND 4TH MARDIV ONLY)	
ORIGINATOR'S UIC	JRS CONTROL
FS REPORT INDICATOR	
REPORT NUMBER	

-- Identifies the organization's requisition number for the item which is deficient.

-- Indicates the last known holder of the requisition.

-- Federal Stock Number of Deficient Item.

-- Indicates that requisition is for deficient combat-essential equipment, exceptional need for item exists, etc.

-- Table of Authorized Material.

-- Item Identification Number.

CARD NUMBER	JRS CONTROL
SECURITY CLASSIFICATION	
TRANSACTION CODE	
CARD TYPE	
UIC OWNER	RECORD CONTROL
Leave blank	SECONDARY CONTROL
TAM CONTROL NUMBER	
EQUIPMENT ID NUMBER	
SERIAL NUMBER (D/L ITEM)	SECONDARY CONTROL
HOUR	
ORDINAL DATE	
NORM/NORS/IT (D/L ITEM)	
ECHELON OF MAINTENANCE	
OPERATIONAL READINESS FLOAT	
NUMBER AUTHORIZED	
NUMBER POSSESSED	
HOLDER OR DESTINATION (D/L ITEM)	
TRANSMITTING COMMAND IDENTIFYING DATA (ENTERED BY FMFPAC, FMFLANT, 4TH MAW AND 4TH MARDIV ONLY)	
ORIGINATOR'S UIC	JRS CONTROL
FS REPORT INDICATOR	
REPORT NUMBER	

-- Table of Authorized Material.

-- Identifies the last four characters of the applicable Julian date.

-- Not Operationally Ready, Maintenance/In

-- Transit Status. Process whereby an organization receives a float item in exchange for deadlined equipment and accounts are adjusted accordingly.

-- Identifies the organization performing the maintenance upon a deadlined item.

CARD TYPE RM4 -- LOGISTIC REMARKS

CARD NUMBER

SECURITY CLASSIFICATION

TRANSACTION CODE

CARD TYPE

JRS CONTROL

UNIT IDENTIFICATION CODE (UIC)

RECORD CONTROL

REMARKS CD SEQUENCE #

TOTAL CARDS IN REMARK

DATA ELEMENT LABEL (1ST CARD OF RMK ONLY)

REMARK IDENTIFICATION (1ST CARD OF RMK ONLY)

EFFECTIVE DATE OF RMK (1ST CARD OF RMK ONLY)

SECONDARY CONTROL

REMARK (53 COLUMNS IN SECOND AND SUBSEQUENT CARDS OF A REMARK)

(29 COLUMNS IN FIRST CARD OF A REMARK) REMARK

ORIGINATOR'S UIC

REPORT INDICATOR

REPORT NUMBER

JRS CONTROL

FS

-- Remarks Card Sequence Number.

-- Identifies the type of logistic remark to be addressed.

-- Indicates the Table of Authorized Material control number to which remarks are being addressed.

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      Assistant Chief of Staff, G-3
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      Adjutant
      Director Division Combat Readiness Central
      Division FORSTAT Officer
      Division MARES Officer
      Material Management Officer
      Data Systems Officer
      Division FORSTAT NCO and enlisted assistants
      Division MARES NCO and enlisted assistants
      Selected division staff officers with recent reporting
          unit level command experience

   b. I Marine Amphibious Force:

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